GRUMMAN plane news

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Navy adds to F-14 buy . . .

On September 26, Navy Secretary John Warner announced that Grumman Aerospace and the Navy had signed a contract covering the production of 50 F-14A Tomcat fighters for Fiscal Year 1974. Under terms of the contract, procurement unit cost for the 50 F-14 aircraft in FY '74, at target, would be $13.5 million apiece, which includes engines and other government furnished equipment.

In late July, the Senate Armed Services Committee authorized $197.6 million of the Navy's $703 million request for the F-14 for FY 1974. The committee required the Navy to complete negotiations for 50 aircraft with Grumman and present a contract agreed to by both parties before Congress would consider authorization of the remaining $505.4 million. On September 25, the Senate passed an amendment to restore the funds. Subsequent buys of the F-14A will depend on future Congressional authorization and funding appropriations and will be negotiated annually by Grumman and the Navy. No options for future buys are included in the present agreement.

To date, 134 F-14A aircraft have been contracted for by the Navy in Lots I through V. Of these, 35 have been delivered to the Navy. Of the 50 aircraft in the FY '74 buy, 32 are scheduled to go to the Fleet and the remaining 18 are expected to be delivered to the Marine Corps, according to the Navy. Deliveries of the FY '74 buy are scheduled to begin in May 1975 and be completed in December 1975.

Grumman Aerospace expects to realize a 8.9% profit—$25 million—on the new contract if it can produce the 50 aircraft at the contract target cost of $281.5 million.

The first Fleet F-14 squadron is expected to be operational at NAS Miramar in December 1973, and the initial Tomcat squadron to be deployed aboard a carrier is scheduded for November '74.

The Navy plans to buy 334 F14As which should carry production through 1978.

Family Day at Bethpage . . .

"For the first time in many years, Grumman is opening its doors to the families of all its employees. The facilities and tools are impressive but Grumman's most valuable asset continues to be people, not only those who are employed here but also those who support our employees at home."

Thus reads the opening remarks in an invitation letter from Grumman Aerospace Chairman of the Board and President Joe Gavin to all Aerospace employees welcoming them to Family Day at the Bethpage facilities on Oct. 28. Plant tours, work demonstrations and general visiting in selected areas are all on the agenda for giving families a first-hand look inside Grumman.

"The collective efforts of every member of the Grumman family have made us successful in the past and will make us successful in the future," Gavin continues. *"The products you see today are examples of the excellence and quality that have established Grumman's reputation throughout the world, a reputation that we can all be proud of.*

"As part of the Grumman family, I invite you to enjoy your day at our Bethpage facility and to become better acquainted with your company, its products and its people."

The hours for Family Day will be from 9 a.m. to 3 p.m. To insure that Family Day is strictly limited to employees and their families, the Family Day Committee requests that all employees register themselves and their

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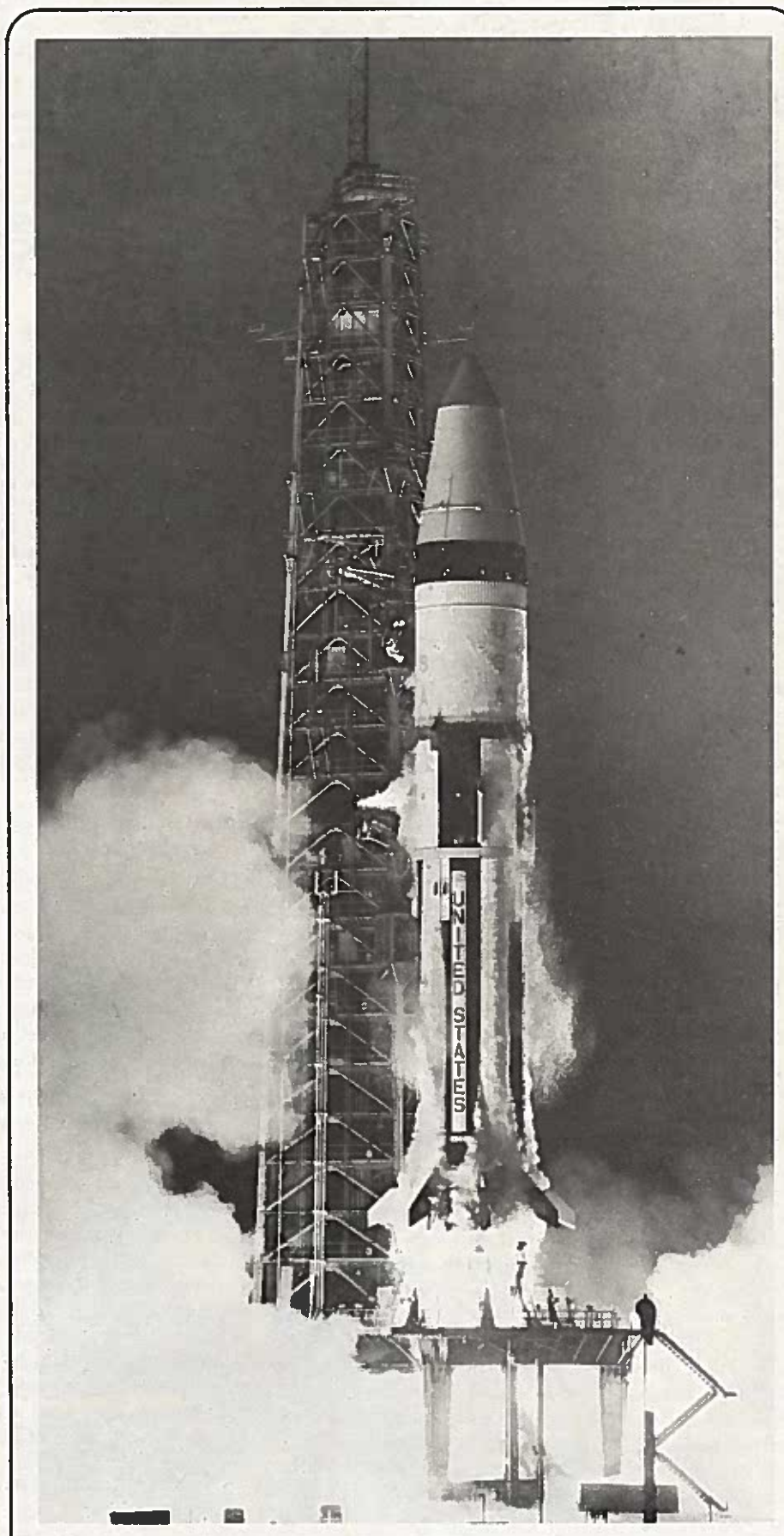
Beech merger off

Clint Towl, Chairman of the Board of Grumman Corporation, and Mrs. O. A. Beech, Chairman of the Board of Beech Aircraft Corporation, jointly announced on October 4 that discussions pertaining to the possible merger of the two companies had been terminated.

Towl and Mrs. Beech said that after considerable discussions and research no mutually acceptable means could be agreed upon for accomplishing such a merger.



U.S. space effort was highlighted by the successful Apollo Program which landed 12 American astronauts on the moon for scientific exploration. NASA, which guided nation's space program is celebrating 15th anniversary this month.
(Story on page 7)

Clint Towl on pensions—

'Grumman Plan fully-funded . . . best in industry . . . funds only for benefit of Plan members . . .'

(In recent months there has been such heightened interest in private pension plans — both in congressional hearings and the nation's press—that Plane News went to Clint Towl, Chairman of the Board and Chief Executive Officer of Grumman Corporation, for an explanation of the Grumman Pension Plan and also to get some of his views on pension plans in general. The following article is the result of that interview.)

PLANE NEWS: Occasionally there are articles in the press concerning mismanagement or misappropriation of funds from private pension plans. Would you explain the history of the Grumman Pension Plan, how its funds are invested, and what safeguards there are to protect against mismanagement or misappropriation?

CLINT TOWL: Our pension Plan was adopted during World War II and became effective on January 1, 1943. It is a trusteed plan. That is, all of the assets are held in trust, under trust agreements, for the sole benefit of the members of the Plan, both active and retired and their beneficiaries.

The Grumman Corporation Board of Directors has the ultimate responsibility for everything connected with the Pension Plan. Bankers Trust Company of New York is the trustee of one third of the Pension Fund and three directors of Grumman Corporation—Jack Bierwirth, Bill Schwendler and myself—are the joint trustees of the other two thirds. One half of the assets in our trust are managed by the John Hancock Mutual Life Insurance Company of Boston, where they are deposited, and the other half is managed "in house" here by us. Ed Balinsky will assist us by recommending and implementing our investment program. The actual securities that we hold, however, will be deposited in a custodian account with Morgan Guaranty Trust Company of New York.

The trustees are bound by the trust agreements and are required to meet the fiduciary requirements of the law; that is, they must abide by the Federal and State Rules and Regulations that pertain to those persons and institutions who, in fact, take care of the pension funds. They are not responsible for any loss to, or diminution of, the funds under their control unless it is due to their own negligence or willful misconduct or lack of good faith; but I don't believe we have much to worry about in that regard.

PN: Who determines when changes should be made in the Pension Plan?

CT: Although a committee of the Board is charged with overseeing the management of the pension funds, the entire Board must act on any changes in the Plan. This does not mean that proposed changes must originate with the Directors; anyone may make a suggestion at any time, either through the Corporate Suggestion Program or through the Employees Pension Board.

PN: What is the Grumman Pension Board, who comprises it, and what duties do they have?

CT: Our Plan provides for an Employees Pension Board of from three to five members. The Pension Board members are responsible for the administration of the Plan and for carrying out its provisions, including interpreting its Rules and Regulations. The Pension Board adopts mortality and other tables necessary for the operation of the Plan and makes recommendations from time to time to the Board of Directors for changes in the Plan. At the present time there are four members of the Employees Pension Board. They are Larry Rockwell, Bob Bradshaw, Bill Voorhest, and myself.

PN: Who is eligible for participation in the Pension Plan?

CT: Any employee of Grumman Corporation or of any subsidiary corporation that has adopted the Pension Plan automatically becomes a member of the Plan on the first of the month following the completion of five years' service. Members start to accrue benefits at that time. This service, by the way, does not have to be consecutive.

PN: You said a person has to wait five years to be eligible for the Plan. Why is that?

CT: When we started the Pension Plan during World War II, we had thousands of people who had joined us on a temporary basis to help in the war effort. They and we knew that they would not remain employed here once the war was over. But in 1943, we didn't know when that day would come. So we decided to adopt a reasonable waiting period so that large amounts of contributions would not be accumulated for a large number of temporary employees, you might call them, and no change in that waiting period has been made since then.

But, as I see it, the important thing about a pension plan is how much does a person get upon retirement. Reducing the waiting period would result in benefit accruals starting earlier which would mean increased costs. If that became necessary because of future Federal legislation, we would then have to take a good look at the amount of increased costs involved. You know there is a limit as to what we can spend for pensions and the like. If we found that we couldn't afford the increased costs and maintain our present pension formula at the same time, we might then have to adjust the formula so as to keep our contributions at the present level. We are currently contributing at a rate of about 10% of the base pay of everyone who is now a member of the Pension Plan.

PN: Has the Plan changed at all since it was originally established?

CT: Yes, it has, many times. Some of the features in our Plan that were not in the original version include joint-and-survivor options, the surviving-spouse benefit, and an annual cost-of-living adjustment to the pensions that are being paid. Perhaps the most significant change took place effective January 1,

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Grumman Corporation elects Balinsky to vice presidency

The Grumman Corporation Board of Directors on October 4 elected Edward Balinsky Vice President - Investment Management. Balinsky will recommend and implement investment programs for the parent corporation. Balinsky reports to President Jack Bierwirth and is situated in Plant 5, Ext. 1673.

Balinsky, who grew up in Passaic, N. J., is a 1951 gradaute of the Wharton School at the University of Pennsylvania. He followed that with four years in the Navy as a supply officer, then spent a year at R.H. Macy's in New York City before deciding his career was in industry, not retailing.

He joined NBC, an arm of RCA, working in financial planning and analysis, continued his studies at Columbia and earned a master's degree in business in '57. Following that, Balinsky was selected for a David Sarnoff Fellowship; it meant another year's study, this time in advanced statistics and finance at Columbia.

When he returned from his year's fellowship to NBC in 1958, the division of RCA was experiencing reducing pains—and that prompted Ed to make another move, this time as investment manager to a private holding company. It was in this assignment that Balinsky got a broader view of investment management, not only in stocks and bonds, but in various aspects of industrial and real estate holdings, as well.

Ed Balinsky

In 1963, Ed joined National Distillers and Chemical Corporation, where he was involved in a number of projects. With National Distillers, he served in corporate finance, first as financial analyst, then as senior corporate planning associate, and later as vice president-finance and administration for one of the corporation's operating divisions.

Over the past 15 years, Balinsky has had to evaluate the quality of management, corporate planning, and the financial outlook of more than 100 firms, and this inside view of industrial America has only strengthened what he terms his "naturally" conservative outlook.

"A dollar is hard to make and easy to lose," is the way he puts it. Because of that philosophy, he is a strong believer in closely scrutinizing a company's operating statement and balance sheet when he's looking for new investment possibilities. From this he says, he can get a truer understanding of where a firm gets its earnings, and the quality of those earnings, too. And just in case you're thinking that "conservatism" is a synonym for "stand stillism," Ed refutes that by declaring "Conservatism doesn't mean you have to be sleepy and just sit on your investments."

Looks to future

But it does mean you have to be prudent and think of the long pull, he cautions, especially when you are investing monies from a pension fund, for instance. He cites several "go-go" stocks of the late '60s as reasons enough to stay away from the get-rich-quick investment philosophy. Those so-called "go-gos" that once brought hundreds of dollars a share can now be purchased for as little as $10 in some cases. Quality research of quality companies, he feels, quite often results in quality investments. And though you don't have to stick with blue chips, you do have to look for a company with a sound financial base and growth potential when you're thinking of investing.

Ed, who has been with Grumman Corporation since July, likes to escape with his wife Sally from their New York City apartment to their hideaway home in Stockbridge, Mass. They take refuge there on weekends, Ed dividing his time between books—"I like biographies and history" — and working on the house and grounds. Sally most likely could be found painting in oils while preparing for a showing either at Stockbridge or New York.

And how has Ed fared at Grumman so far? "I've been acquainted in one way or another with over 100 companies in my life, and I've never seen one in which the people were so concerned and wanted so much to help. I'm impressed — it's like marrying into a large family."

Sorry we're late . . .

Our printer observed Columbus Day — and it set back production a day. And our last issue was delayed a day because of a press problem. We expect to be back on schedule on Oct. 26.

Cited for test work. Chuck Sewell, chief test pilot for Grumman Aerospace, was honored by the Society of Experimental Test Pilots two weeks ago with the Iven C. Kincheloe Award. (Photo by Gerry Costello)

Test pilots pick Sewell for Kincheloe Award

It came as no surprise to friends of Grumman Chief Test Pilot Chuck Sewell that he was named to receive the 1973 Iven C. Kincheloe Award by the Society of Experimental Test Pilots. After all, Chuck's been doing best what he likes most—experimental flight testing — for some years now, both as a Marine and Grumman test pilot.

The Kincheloe Award, named for an outstanding young Air Force test pilot killed in the late '50s at Edwards Air Force Base, puts Sewell in very select international company. Among those who have received the Kincheloe Award have been Scott Crossfield and Joe Walker, for their work on the X-15, the English-French Concorde test team, and several astronaut teams, including the first moon landers, Neil Armstrong and Buzz Aldrin, and their Apollo 11 companion, Mike Collins.

In naming Sewell, the Society for Experimental Test Pilots cited his work on the F-14, calling his spin testing and spin prevention system on the Tomcat "outstanding accomplishments in the conduct of flight testing."

Sewell's career before he joined Grumman in 1969 was a distinguished one also. The former Marine lieutenant colonel logged more than 300 combat missions in Korea and Vietnam, was an exchange pilot with an R.A.F. fighter's squadron from 1955-57, graduated from the Navy's test pilot school in '61 and stayed on at Patuxent River until 1964 as a test pilot in the flight test division at the Naval Air Test Center. He headed for Vietnam as commanding officer of a Marine Phantom fighter squadron in 1965 and returned to Patuxent River in 1967. He remained at NATC in Operation Test and Evaluation until he retired from the Marines as a lieutenant colonel in 1969. During his service years he continued his schooling toward an engineering degree at the College of William and Mary, University of Maryland, and George Washington University.

Chuck joined Grumman in 1969 as an experimental test pilot, performed spin demonstrations on the EA-6B and low-speed development on the F-14A, and is presently conducting spin pre-

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Retirees seminar

Grumman personnel of the Bethpage area who are scheduled to retire on December 31 are urged by the Grumman Pension Department to attend a special pre-retirement meeting on Thursday, October 25. The session will be held in the Plant 28 conference room from 8 a.m. to 12 noon, and notices have been distributed to the more than 50 persons who are due to retire at the end of 1973.

Representatives of the Social Security Administration will be on hand to discuss benefits under Social Security and Medicare, and a Grumman spokesman will talk on insurance coverage and the Grumman Pension Plan. A personal pension interview will be assigned each person for a date in November.

Photo by Fred Annetta

AEROSPACE FAMILY DAY, OCTOBER 28

(Continued from page 1)

families for the tour. Registration will be conducted at all Employee Services offices from Oct. 23-26.

The rules for registration are:

- Employees can register only their immediate families.
- Employees on loan to other departments can register at the location of their permanent assignment or through the ESO at their present assignment.
- Registration for invited guests of Gruman Aerospace will be arranged through their immediate operations.

At the time of registration, tags with the employee's signature to be worn during Family Day will be issue for for employees and members of their family. Employees are also required to wear their regular badges during Family Day.

At the time of registration employees will also be given Family Day packets which include Tomcat, Hawkeye and Intruder decals, a Family Day bumper sticker, a four-color photo of Grumman products, a letter from Joe Gavin and balloons.

Twelve plants will be open for Family Day tours, each with special demonstrations or displays. Some of the major features include:

Plant 1 — F-14A major subassembly; Plant 2 — EB welding, forming press area, tool and die, hydraulics; Plant 3 — machine shop, F-14A wing assembly, honeycomb core fabrication; Plant 4 — aircraft hangars, product display (A-6, EA-6B, E-2C, F-14, trailers, LM); Plant 5 — avionic equipment, support equipment, cable fabrication, structural test; Plant 10 — quality control laboratories; Plant 12 — material and process laboratories; Plant 14 — electronic system center, thermal laboratory, ASW laboratory, optics and laser laboratory, antenna laboratory, electrical systems laboratory; Plant 15 — F-14A/E-2C vehicle and support engineering; Plant 25 — A-6, space programs engineering; Plants 30 and 35 — general office areas.

To insure the comfort and safety of all visitors during the tours, the Family Day Committee also requests that everyone follow these ground rules:

- Employees are responsible for the conduct of their family while in the area.
- Visitors will remain within the roped aisles of the plants and not wander in unauthorized factory areas.
- No smoking in any plants.
- No packages, food or cameras may be carried in or out of the plants.
- Observe instructions from plant security personnel concerning parking and driving.
- Enter and exit the plants at the designated areas.
- Refrain from touching or disturbing any articles in the plants or on desks in office areas.

When employees enter company grounds on Family Day, they will be directed to specific parking areas where they must leave their cars for the day. Visitors may either walk or use the buses that will be provided to carry them to the different plants which will be opened for the tours.

Emergency medical aid will be available at all times during the Family Day tours. Employees or visitors in need should contact a security guard or a plant tour guide.

If any employees have any questions regarding registration, restrictions or other matters regarding Family Day, they may contact Steve Juengst, Ext. 7209, Bill Guarino, Ext. 1797 or Steve Kiss, Ext. 1797.

E-2C visitors. During a recent visit to Bethpage, Capt. Jack Eckstein — Commander Carrier Airborne Early Warning Wing 12—toured the E-2C production facilities under the guidance of program director Tom Guarino. During the day, Eckstein addressed the employees in Plants 4 and 36 and expressed his appreciation for the work they are doing on the planes. Eckstein is pictured at left as Cdr. Tom McClenahan—commanding officer of the Replacement Air Group Wing—also addressed the group. (Photos by Bob Settles)

Exhibit draws 126 entries—

Ellen West becomes 'first lady' of Hobby Show

Photos by Harry Prodromindes

It's not every year that an entry from the Sewing Class wins the Grand Prize in the Annual GAA Hobby Show. But last Friday, in Plant 28, Ellen West of Plant 35 Data Processing Center, made history with her pink maid-of-honor dotted-Swiss gown with matching floppy hat and handbag—and—she is the first woman to win the Grand Prize of the GAA show. Awards were presented by Vice President Gordon Ochenrider.

"I was really surprised to walk in here and find the first place ribbon on my dress," said the first lady of the Hobby Show, who also won a $100 U. S. Savings Bond. "I didn't even see the Grand Prize ribbon, and when I did I just couldn't believe it."

Ellen has been sewing for 10 years now and rarely buys a factory-made dress or pant suit. "When I go to the store and see what they are asking for clothes now a days, I head toward the fabric department and pick out my own wardrobe."

Each year, the Hobby Show has proven to be an outlet for the many talents of Grummanites. And this year was no different. As usual, the judges had a hard time selecting the winners in each class. Table after table was adorned with such spare-time productions as a rooster plaque made out of nuts and seeds, a hand-made spinning wheel, a coin collection of U. S. silver quarters, leather belts, and little metal chairs ingeniously made out of old beer cans. There are also bi-plane models, modified planes, needlepoint samplers, knitted shawls, and woodcarving.

The winners for this year are:

Ceramics - 1st - Debbie Munroe; 2nd - Arlene Deech; 3rd - Karen A. Forget.

Coin Collections: 1st - Richard Van Valkenburgh; 2nd - Kenneth Hale.

Stamp Collections: 1st - Tom Telera.

Miscellaneous Collections: 1st - Will Pettit; 2nd - Peter Cassese Jr.; 3rd - Dan Makoske.

Crocheting: 1st - Marge Kearns; 2nd - Judith Matthews; 3rd - Anne Hall.

Embroidery: 1st - Stephanie Russell; 2nd - Charlotte Gold; 3rd - Peggy Bunzel.

General Collection: 1st - Jack Krupnick; 2nd - Katherine Agillo; 3rd - Doris Sokolski.

Knitting: 1st - Theresa Van Haaften; 2nd - Mildred Reh.

Leather Work: 1st - Joe Thomson.

Metal Work: 1st - Joseph Nalevaiko; 2nd - Betty Schledorn; 3rd - Hank Kwiatkowski.

Model Planes (Non-Flying-Scale): 1st - James Carmelitano; 2nd - William C. Barto; 3rd - John Samuelson.

Model Planes (Flying Non-Scale Original): 1st - Wally Kranz; 2nd - Robert Aberle; 3rd - Donald Peters.

Model Planes (Non-Flying Non-Scale Original): 1st - Walter Pytlowany.

Model Railroads: 1st - Raymond Muntz.

Needlepoint: 1st - Charlotte Gold; 2nd - Mary Zolkoski; 3rd - Peggy Bunzel.

Sewing: 1st - Ellen West; 2nd - Betty Schledron; 3rd - Nancy Ann Ringwald.

Ship Models (Kits): 1st - Fred Wilms; 2nd - Walter Pytlowany.

Ship Models (Original Design): 1st - DeWitt Blossom.

Woodcarving: 1st - Eric Pitfick; 2nd - William E. Balogh.

Wood Work: 1st - Robert J. Conover; 2nd - Benjamin J. Mroz; 3rd place - Charles Towers.

Pluck two from the Atlantic

Though their fishing trip turned out all wrong—it was they who were finally plucked out of the sea—two young men can thank veteran test piolt Ernie Von Der Heyden that things didn't get much worse. On Monday morning, Ron Mattson, whose father Irwin works in Facilities Maintenance, Plant 6, and a friend left from Shinnecock Inlet on a shark-fishing expedition. It wasn't very long before their 19-foot runabout developed trouble, and the two were more than happy that the sharks they were looking for didn't find them.

Water entering through an access hole covered the battery causing the motor to conk out, and then a heavy sea swell succeeded in swamping and overturning the craft. When they didn't return by Monday night, Ron's dad was worried. By Tuesday morning, he was frantic. He decided to take his own boat out to search for them, but Jack McNamara, head of Facilities Maintenance who happened to be at Calverton on Tuesday, suggested they ask Flight Acceptance to help in the search.

A short time later, Mattson, McNamara, Harold George of Facilities Engineering, and pilot Ernie Von Der Heyden were on their way in a Grumman Baron to try and locate the lost fishermen. Within 10 minutes they had spotted the young men about three miles off Westhampton Beach hanging onto their capsized boat. A call to the Coast Guard brought a rescue helicopter to the scene. Dropped by the heli at the Suffolk County Airport at Westhampton, the young men were flown back in the Baron by Von Der Heyden to Calverton where they got warm clothing and some hot soup. In all, young Mattson and his friend were in the cold, choppy Atlantic about 24 hours—and though their fishing trip didn't end up exactly as they had expected, it's not likely they'll ever forget it.

Back on dry land. Search party from Calverton located Ron Mattson (2nd L) and George Tollesson (2nd R) who had been hanging on to capsized boat for 24 hours in chilly Atlantic. Participating in search were Jack McNamara (L), Irwin Mattson (C), Harold George (R), and (top) pilot Ernie Von der Heyden. (Photo by Ed Finnick)

Make Florida trip reservations

GAA still has reservations for an air trip to Orlando, Fla., over the year-end holiday break. Orlando is within easy motor distance of Disney World, Kennedy Space Center, and Cypress Gardens. The tab: $208 head of family, $202 for spouse, $165 for child under 17, and $120 for child under 12. The fee includes hotel, transfers, tips, etc. Special rates are available for flight only. Call, GAA, Ext. 2133 or 2269.

Congressmen visit Bethpage during three-day Island tour

Seven freshmen Congressmen visited Bethpage the morning of September 28 as part of their tour to acquaint them with Long Island. During their visit to Grumman, the legislators were welcomed to Grumman by Vice President Gordon Ochenrider, who provided them with a rundown on corporate operations; they then were briefed on the F-14 by Vice President Mike Pelehach. A tour of the Plant 1 production facility followed.

The bi-partisan "get-acquainted with Long Island" tour, the first of a series of such visits to familiarize newly elected Congressmen with Long Island's assets and potential, included visits to outstanding industries. The three-day tour was sponsored by the L.I. Association of Commerce and Industry and Representative Angelo Roncallo.

Among those Congressmen attending were: Andrew Hinshaw (R-Ca.); Paul Cronin (R-Mass.); Don Young (R-Ala.); Leo Ryan (D-Ca.); Joe Pritchard (R-Wash.); Antonio Borja Won Pat (delegate from Guam); M. Caldwell Butler (R-Va.); David Towell (R-Nev.). Representative Norman Lent of Nassau County accompanied the group as co-host.

Photos by Fred Annette

NASA

NASA celebrates its 15 year anniversary

Who would have believed in October, 1958, that the newly formed National Aeronautics and Space Administration would guide the United States into a space program that on July 20, 1969 would place a man on the moon?

On October 1, when NASA marked its 15th birthday, the 100-ton space station, Skylab, was orbiting the Earth every 90 minutes. That's quite a contrast to January 31, 1958, when this nation launched its first satellite, Explorer 1, which weighed a little over 30 pounds.

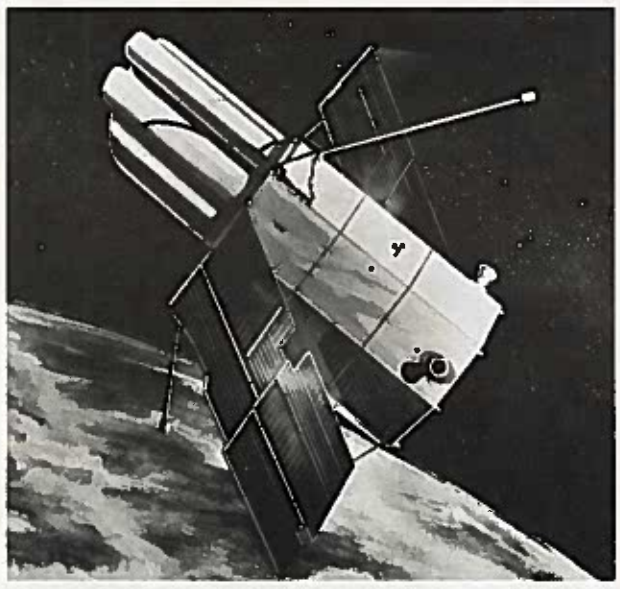
One has to marvel at the tremendous progress this agency has made since 1958. "The space program in 15 years," says NASA administrator Dr. James C. Fletcher, "has brought home an important truth: the human imagination is not limited, and can produce the new advanced technology that modern society must have in the decades ahead."

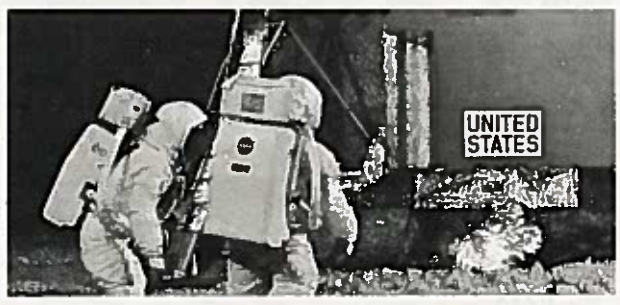
It is a significant anniversary for the government agency because "we have successfully completed the major programs of our first 15 years (except Skylab, which still has several months to go), and because we now made a good start on the new programs that will help make the next 15 years exciting and productive," says Fletcher.

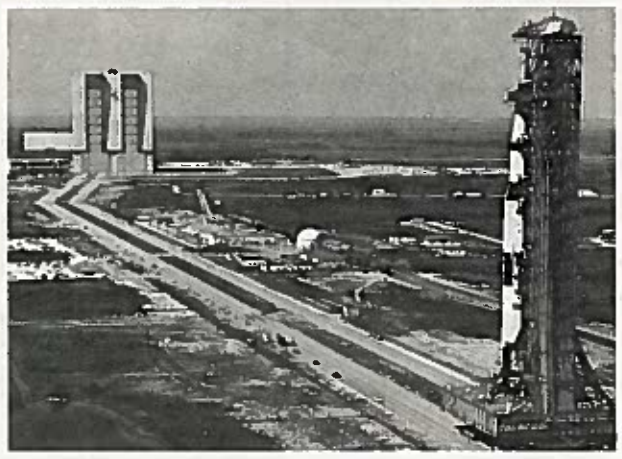
The progress that NASA has made over its first 15 years closely parallels Grumman's participation in the Space programs. Grumman has been involved with NASA since it first built the vacuum-free canisters for the ECHO satellities in the early 1960s. Various studies with NASA's backing have been performed by the Grumman team over the years, ranging from the early stages of space exploration with search-and-rescue tactics for re-entry vehicles to the highly publicized Lunar Module rendezvous-method to land a man on the moon. In recent years, the company has also had a $40-million contract to design and build the wing for the Shuttle orbiter and several study contracts including solar energy and energy conservation.

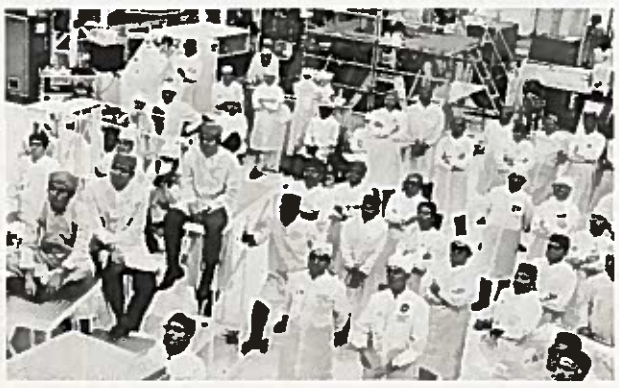
What NASA has accomplished during its first 15 years in terms of specific programs is well known. The Apollo program dominated the Space Age in the 1960s with both the Mercury and Gemini programs paving the way for man's first venture to land on the moon.

During 1961 and 1962 more than a million man-hours of engineering studies were undertaken before final decisions were made on precisely how the moon landing would be carried out. By November, 1962, the decision was made to use one Saturn 5 and the rendezvous method, with the awarding of the Lunar Module concept to Grumman.









Technological advances are historical milestones

"The decision to choose the lunar rendezvous method was one of the critical decisions in this country's history, and one of NASA's finest achievements," says Fletcher.

While Mercury and Gemini were being completed, over 300,000 people in 20,000 business firms participated in the Apollo program. NASA achieved its goal on July 20, 1969, when Neil Armstrong stepped onto the moon's surface and said, "That's one small step for a man, one giant leap for mankind."

Twelve astronauts eventually explored the moon; in December, 1972, the flight of Apollo 17 officially ended the program. " . . we are now moving out into a period of preparation for much more intensive uses of space in the 1980s. It is time to put more emphasis on where we are going, not where we have been," says Dr. Fletcher.

The nation has returned, so to speak, from the moon, and most likely will not revisit it in this decade. NASA will concentrate during the '70s on improving the technology and capabilities for using manned and unmanned spacecraft in Earth orbit. Skylab and the Space Shuttle are major steps in that direction.

This year is the year of the Skylab in manned space programs. Skylab is gaining new knowledge for the improvement of life on Earth; investigations and experiments conducted by astronaut teams aboard Skylab are revealing more about Earth's environment and resources, and new ways are being developed to evaluate programs directed at preserving or enhancing those resources throughout the world.

The next major manned flight program is the joint Apollo-Soyez Test Project — the first manned international space effort. American astronauts, in an Apollo spacecraft, will rendezvous, dock and visit an orbiting USSR Soyez spacecraft. In turn, Soyez crewmen will pass through the docking hatch and return the visit to Apollo. Target date for the launch is set for July 15, 1975.

"In this decade," says Fletcher, "there is less emphasis on international competition as the spur to our space effort and growing emphasis on international cooperation in space."

NASA's first international cooperative satellite

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HOUSTON

New Aerospace subsidiary is across street from NASA

Just off the Gulf Freeway, some 30 miles south of Houston—the Southwest's bustling industrial center—there's a road appropriately named NASA 1 which leads to the Johnson Manned Space Center. "Across the street from NASA" (which in Texas language may be a mile or two), beyond the busy highway in this flat, almost pastoral setting, is the main office of Grumman Houston Corporation, a former branch office and now the newest subsidiary of Grumman Aerospace.

Buxton elected president

On Oct. 1, Aerospace Chairman of the Board and President Joe Gavin announced the formation of the wholly owned subsidiary with Jack Buxton elected President, Chief Operating Officer and Treasurer. Other officers include Joe Gavin as Chairman of the Board, and Raphael Mur, Secretary.

Grumman Houston's mission, at least for the next two years, is that of fulfilling a backlog of manufacturing manhours in support of aircraft and ground support equipment programs of Grumman Aerospace. In addition, the new subsidiary will continue to seek new contract work from NASA and other aerospace-related organizations. It will also direct its attention to the petroleum and petrochemical industries in the Southwest to develop various electrical and mechanical components and assemblies for oil and chemical production, and for oil exploration.

To employ 130 people

By the end of the year, Grumman Houston expects to employ a total of about 130 people. According to Buxton, one of the areas in which the subsidiary offers the greatest potential is in its ability to competitively price aerospace expertise for penetrating new market areas. "The technology used by the petroleum industry is very similar to that of the aerospace industry," he says. "For instance, much of the equipment that is required in an oil drilling operation is similar in nature to that used by military aircraft. Therefore, we plan to explore these new areas to find opportunities where we can best apply our knowledge."

For more than a decade, the personnel and facilities of Grumman Houston have represented one of the parent organization's key operations in support of the Apollo program. Its biggest single activity was the Lunar Module (LM), designed and built by Grumman, which underwent intensive environmental testing at the Johnson Space Center prior to its first flight.

Will seek new contracts, enter commercial markets

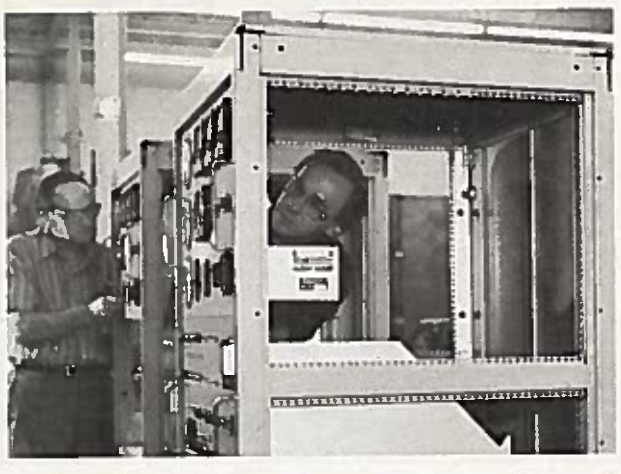
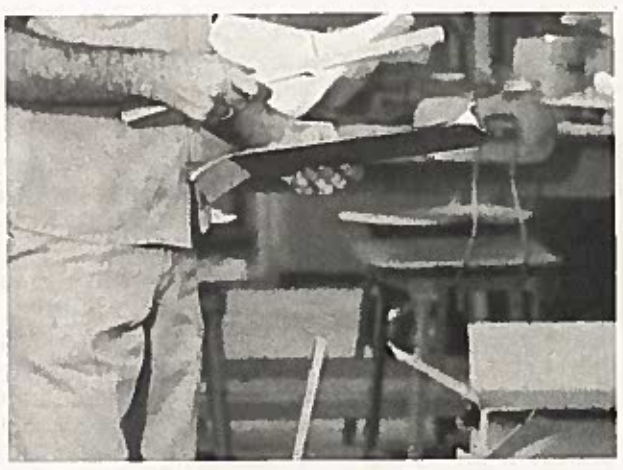
Designed medical equipment

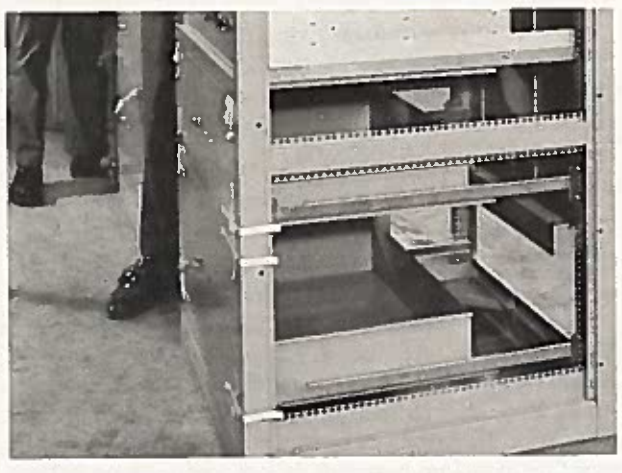
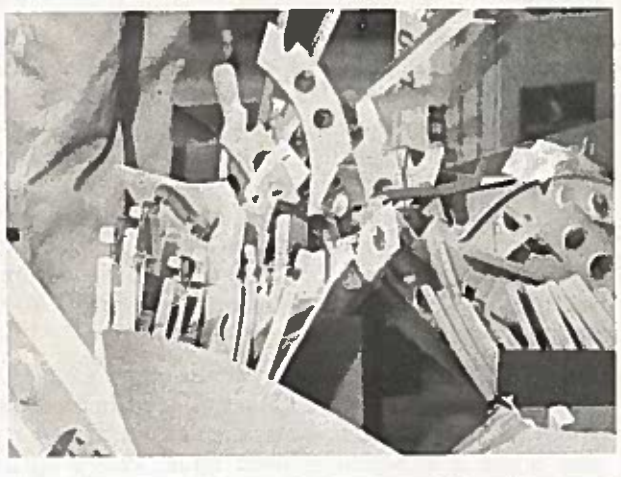
The Houston subsidiary has also been involved with the design and manufacture of specialized systems and devices for medical and surgical applications. Engineers and technicians at Grumman Houston, working closely with Dr. Edward B. Diethrich and his staff at the Methodist Hospital, developed the first human heart transplantation and preservation chamber. The Houston group has also designed and built in Operating Room Control Console—now being marketed by Grumman Health Systems—which centralizes many of the components and systems required for surgery. Units are currently installed and operational at the Arizona Heart Institute and North Shore University Hospital, Manhasset, N. Y.

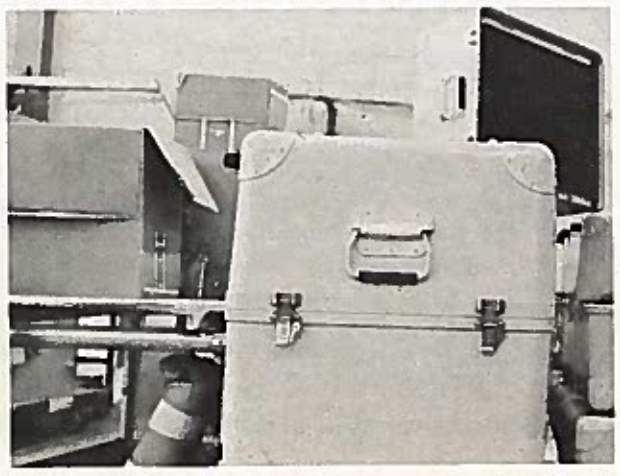
With Grumman 33 years

Grumman Houston's President Buxton has been with Grumman for 33 years. He began his career with the company in the Inspection Department in Plant 1 and during World War II served as F6 and F7 representative in the Service Department's Navy/Marine Air Group. His Pacific and Far East tour included the campaign of Okinawa and ended in Peking in 1945. After the war, Buxton was assigned to COMAIRLANT in Norfolk, Va., and later moved to Washington, D.C., to serve as Grumman's resident interface with the Department of the Navy. In 1962, Buxton moved to Houston to open the new office. After NASA awarded the LM contract to Grumman, Buxton then concentrated his attention on the manned thermal vacuum testing with LTA-8. At one point, the Houston office employed over 400 engineers and technicians and became known as the Houston Operation, Plant 52. In February, 1972, the Board of Directors of Grumman Aerospace Corp. elected Buxton a vice president, and in April, 1973, NASA bestowed on him its Public Service award for his service to the success of the Apollo program.

The new subsidiary has now become a permanent facility and is the latest progression for Grumman Houston. And Buxton views his firm's capabilities and future with great enthusiasm. "We expect to grow in an orderly fashion," he adds, "as our business base is expanded."



On certain government pensions

'When the public fully realizes tremendous costs, brakes will be applied'

(Continued from page 2)

1948, when the pension formula was increased from 1¼% of the Social Security base plus 2% of the excess to the present 2¼% of the Social Security base plus 3% of the excess.

PN: How is the Pension Plan tied into Social Security coverage?

CT: Our Pension Plan is not tied to Social Security benefits in any way. The pension formula is 2¼% of the amount of base pay on which Social Security taxes are based, plus 3% of any excess while an individual is a member of the Pension Plan. But that is the only connection with Social Security. In other words, a Grumman retiree's monthly pension payment is not reduced or off-set by any Social Security benefit. If Social Security benefits are increased after a Grummanite retires, so much the better; there is no change in the Grumman pension as the result of the Social Security increase.

PN: And spouses are covered under the Plan?

CT: Yes, they are. I assume you are referring to surviving spouses. If so, they are covered. That is, a spouse is entitled to a pension for life, if a Grummanite dies while actively employed meeting any one of these condtions:

1. Had 20 or more years of service, or
2. His or her age plus years of service equalled or exceeded 75, or
3. Had attained age 60 and had 5 or more years of service.

A different provision says that when a person retires, he or she is given the opportunity of electing a joint-and-survivor option. This results in a somewhat smaller monthly pension but with the proviso that, if a retiree dies before the spouse, the spouse will receive a pension for the remainder of his or her lifetime. Once the election of a joint-and-survivor option or the election not to take such an option at the time of retirement is made, however, it is irrevocable. For instance, if a retiree chooses a joint-and-survivor option, that can never be changed, even if the spouse should die before the retiree.

PN: What are some of the options a husband-wife have under the Plan?

CT: Basically, there are limitless options under our Plan. Two are spelled out in the Plan booklet. The first—Option Number 1—provides for a reduced monthly pension payable to the retiree for his or her lifetime with the provision that, if the retiree should die before the spouse, the spouse would continue to receive the same monthly pension (in like amount) for her or his lifetime. This is sometimes referred to as a 100% option. The second—Option Number 2—is similar to the first except that the retiree would get a somewhat larger monthly pension payment when compared with Option Number 1, but should he or she die, the monthly pension payable to the surviving spouse would be one-half the amount the retiree had received. This is sometimes referred to as a 50% option.

A third option, which will be spelled out in the next revision of the Pension Plan booklet, is a general one reading, in effect, that any other form of pension which shall be approved by the Employees Pension Board is allowable. This permits for wide latitude, but there is one restriction: IRS Regulations state that a retiree is prevented from taking a smaller monthly pension payment than the optional payment he or she would leave to a surviving spouse.

PN: Are funds contributed by the Company actually "deposited" in individual accounts or are these monies deposited into a general fund? And who determines how much the company must contribute each year to meet its pension obligations to its employees?

CT: All contributions are deposited in a general fund, either at Bankers Trust, John Hancock, or at Morgan Guaranty, in the proportion that the Board of Directors determines. They are not actually deposited in separate accounts for each individual participant. Our Consulting Actuary reviews annually the status of benefits accrued to date, estimated future benefit accruals, the amount of pensions being paid, the amount of assets we have in the Pension Fund, and then advises us of the dollar amount we should contribute to the Fund during the following year to keep our Plan fully-funded.

PN: You said our Plan is fully-funded. There has been much discussion, both in the papers and in congressional hearings, on fully-funded vs. partially-funded pension plans. Could you give a non-legal definition of those terms?

CT: Yes, our Plan is fully-funded. This means that there are sufficient assets to provide the pension benefits accrued—that is, earned to date. It does not mean that there are sufficient assets to pay the pension that a person who is now 45 might expect to receive if he or she works to 65. Future contributions, interest and dividends to be received, and the like have to be taken into account when considering future pension payments. But, there are funds there to provide the pension, payable at age 65, that has been earned based on service up to this very moment.

A partially-funded plan is not in this position. A company or union with a partially-funded plan must at some point in the future contribute additional funds over and above its normal yearly contributions so that it will be able to meet its pension obligations. In effect, that means they're only partially meeting their financial obligations to their employees in a pension plan, with a "promise" to make up the difference at some point in the future. It's not difficult to see where problems might arise under the latter situation.

PN: Another subject under discussion in Congress in recent months concerns vested pension rights. What is vesting, what does it entitle a person to, and when is a person covered under vested rights at Grumman?

CT: Basically, vesting means the right to receive a pension either immediately or at some time in the future, upon termination of employment. Under our Plan, vesting becomes effective upon termination of employment for any reason in any one of the three following ways:

1. After service of ten years, a Grummanite is entitled to a pension at age 65. He or she may, however, elect in writing to receive such pension as early as age 60 but, in that event naturally, the amount of the monthly pension would be actuarially reduced to reflect the longer period over which the

accrued pension accumulation would expect to be paid.

2. After 20 years of service and attaining age 50, a Grummanite is entitled at his or her election, to either an immediate pension starting at once or to a deferred pension starting at any age up to 65. If either of these pensions starts at any age less than 60, such pension is also actuarially reduced.
3. Upon termination of employment for any reason after 5 years of service and attaining age 60, a Grummanite is entitled, again at his or her election, to a pension starting either immediately or at any age up to 65. The amount of this pension is the same no matter when it starts.

PN: Does a spouse have any claim to such pension under these conditions?

CT: In the case of the 50 year-old with 20 years' service and the 60 year-old with 5 years' service, the spouse is included only if the retiring employee elects a joint-and-survivor option at the time of his retirement. The spouse of the person with a vested right to a pension after 10 years of service is not included.

PN: We understand that there is a lot of pension legislation currently being debated in the Congress. How does Grumman's vesting rights compare with those being proposed in that legislation?

CT: As I've indicated, for those persons under age 60, our Plan provides for 100% vesting of accrued pension benefits after ten years of service. This provision has been in our Plan since 1971. A pension bill that passed the Senate in September of this year calls for gradual vesting starting at 25% vesting of accrued benefits at five years of service, up to 100% at fifteen years of service. But it also provides that the requirement for gradual vesting does not apply to any existing plan that has 100% non-forfeitable vesting at ten years of service, as ours does. In other words, we've been two years ahead of the Senate, at least, on vesting.

PN: Has the fold-in of bonuses into weekly pay checks had any effect on pensions?

CT: Yes, it has. The pension formula is applied to base pay only. Bonuses, overtime pay, and the like are excluded. Therefore, by folding the bonuses into the base pay, the pension formula from here on is applied to a larger amount and will result in increased pensions.

PN: What provisions have been made for people who want to retire early? Are there any disadvantages for taking early retirement?

CT: I believe I've answered the first part of your question when I discussed vesting, but let me go into a bit more detail. Retiring early means prior to age 65 and being eligible for an immediate pension, that is, one that can start at once. Under our Plan, this can be done as early as age 50 with 20 years' total service. A person meeting this requirment who retires prior to age 60 is entitled to an immediate pension actuarially reduced from age 60. That means it would be less than the monthly pension he or she would be entitled to if he or she were age 60 at the date of retirement. In addition, any member of our Plan can retire at or after age 60 without any reduction in the amount of pension accrued to the date of retirement. The only disadvantage—from a pension standpoint—of retiring early is that the amount of pension is always less than if one continued working, because of the lost pension credit for earnings the retiree would otherwise have received by working longer.

PN: What provisions are being made for present retirees on the pension plan who are affected by the rising cost of living?

CT: Earlier, I mentioned an annual cost-of-living adjustment to the pensions that are being paid. What happens is this: On April 1 of each year the pension of each retiree who was in receipt of a pension on January 1 of that year is adjusted in accordance with the movement of the Government's Consumer Price Index in the preceding calendar year. The maximum annual adjustment — up or down — is 3%. So far, all the adjustments, of which there have been three, have been up 3%. If ever the Consumer Price Index goes down, it's possible these increases may have to be rescinded, but no person's pension will ever be less than it was when it first began.

PN: There has been an increasing clamor about portability and Federal insurance for private pension funds. Would you explain their advantages and disadvantages, as you see them?

CT: Portability involves the development of various highly complicated arrangements through which vested pension credits would move with an employee from job to job or into some sort of Federally established portability fund and ultimately be combined into a single pension. In my opinion, the concept of portability is closely related to other provisions in the private pension system generally. I believe, however, that improved vesting where needed, stricter fiduciary (trusteeship) standards in some cases, and the mandatory improved funding of a company's liability to vested pension plan participants, where such does not now exist, will greatly reduce the need for a portability program. Because we have adequate vesting, because we adhere to the highest fiduciary standards, because our vested liabilities are funded, and because I expect all of these to remain true, I can see no necessity of portability. I also shudder at the thought of a bureaucratically run Federal portability fund. Who would manage it? What would it cost? No one rightly knows.

Basically, I feel the same way about the matter of mandatory insurance covering private pension funds. Of course we hear from time to time of sad situations where pensions are lost due to the sale, merger, or bankruptcy of the sponsoring employer. In my opinion, however, the adoption of reasonable funding and vesting requirements and mandatory Federal fiduciary standards would tend to alleviate the problems which an insurance program is designed to cure, without the high costs that would necessarily accompany a Federal insurance program.

PN: Private pension funds seem to be losing headway to government-funded pension plans—the kind that has been established for government employees in New York City, for example. Could you explain why? Do you see any possibility of a change in that trend?

CT: Why? It's very simple. Governments have the power to tax; private employers do not. Furthermore, many government pensions are not funded but rather are paid out of current income. Carry that out to its natural conclusion and you can easily see that it might not be long before most of a municipality's income is being spent on pension payments, leaving little monies left for day-to-day operations. To meet these rising costs, of course, taxes can be hiked up, and up. But eventually there must come a time when these taxes become too heavy for citizens to carry. And, I do foresee a change in the governmental approach. When the public—the taxpayers — fully realizes the tremendous cost of providing the pensions, some of which pay relatively young people more in retirement pay each year than their last annual base salaries for the rest of their lives, the brakes will be applied. This process has already been started in New York State.

PN: There have been many rumors about changes in the Pension Plan—one, for instance, is a so-called "75-point plan" in which a person would be eligible for a full pension when his or her age, plus total years of service, would add up to 75. Are there any such changes in the works?

CT: I guess we'll always have rumors but, like most of them, there's nothing to this one. I've already discussed the early retirement features of our Plan. There are no present plans to change any of them.

PN: Why can't employees contribute monies toward their own pension funds? Do you foresee any change in that rationale?

CT: As I said earlier, our Plan was established in 1943, in the middle of World War II, when wage controls were severe and taxes were high. We felt then that it would be best for the Company to bear the full cost of the Plan and not burden the employees with any of that cost. Also, if the employees contributed and at some time downstream needed to get at their money, they would have to quit to do so.

And, although we didn't have it in 1943, we now have the Employee Investment Plan which is managed like a pension plan as far as investments are concerned. I'd like to add that the Company makes a matching contribution, up to 25% of a specified limit, to the account of each participant in the Investment Plan. Employees may participate in the Investment Plan if they wish, and, on retirement, they have the option of either taking a lump sum distribution or installation payments up to 20 years, or a lifetime, or other type of annuity. And under the Investment Plan, they can withdraw their contributions, if they need to, prior to retirement without having to quit their job.

PN: How are funds from the Grumman Pension Plan invested—percentage of stocks vs. bonds, for example—and what outside firms are involved in the investment of these funds? How have they done?

CT: They're invested in common stocks, fixed-income investments, and short-term investments, which are sometimes called cash equivalents. The mix of these investments varies from time to time depending upon the manager's view of current market conditions and other factors. As of a month or so ago, the mix was approximately 70% in common stocks, 16.5% in fixed-income investments, and 13.5% in cash and cash equivalents. Up to now, Bankers Trust and the John Hancock have each managed about a half of the total fund. Each of them has discretion as to the investment mix and the selection of individual investments. How have they done? I would answer that this way: Nobody's perfect, and we think everyone could do a better job.

PN: To pose a hypothetical question: Should Grumman suddenly go bankrupt, what could those people presently on retirement expect from the Pension Plan? How about present employees: those who are pension eligible now; those with vested rights; and those with less than 10 years' service? Would the same apply if Grumman were to be taken over by another corporation?

CT: I've already said that our Plan is fully-funded so, in the event Grumman should suddenly go bankrupt, there are enough funds to continue to pay the pensions of those people presently on retirement but without any future cost-of-living adjustments. There are also sufficient funds to pay the pensions of those persons presently eligible for immediate retirement and for those with vested rights to a pension at age 65. For those with less than 10 years of service who are members of the Pension Plan, there are funds for some payment but probably somewhat less than

(Continued on page 12)

Happiness is . . . the laughter of children

Charlie Flower spends his weekends and sometimes weeknights, making people laugh. His face is covered with greasepaint. He wears a curly wig, and an outfit that looks like a funny pair of pajamas.

Charlie Flower is a Shriner Kismet Clown.

Charlie is the business manager for Communication Services in Plant 30, when he isn't visiting local children's hospital wards or nursing homes for the aged. "We go to any function for handicapped children when requested. These things keep us busy just about every Saturday and Sunday." Charlie the clown has been so busy that his wife has had to design another wash-and-wear clown outfit.

It takes about two hours to transform Charles Flower the reserved businesss manager into Charlie the clown. "I've been a clown for about a year now, and I'm still experimenting with my face . . . I just can't seem to get the mouth right."

What makes Charlie don the clown outfit and visit children's wards and homes around Long Island? "I believe very strongly in the motto of the Shriner's Kismet Clown Unit, 'The greatest sound in the world is the laughter of children'," says the grandfather of six.

"I wanted to do something to bring a little happiness into children's lives. By being a clown, I have been able to make children happy, and me, too."

Charlie is quick to point out that he isn't the only Grummanite who moonlights as a clown. Robert Barth, Jim Turner, Ray Smith, and Jim Smith do, too.

"Grumman is also very involved in the charity work that Kismet Clowns and Shriners do. Grumman offered tickets to the Shriner circus this year through the Employee Services offices. And the Grumman Glider Club sent 62 handicapped children to the circus."

Even out of "uniform", Charlie still likes to make people happy. His suit jacket pockets usually are bulging with balloons — and should you hear a balloon burst occassionally in his office, it's just Charlie Flower practicing his balloon sculptures during coffee break.

If you ever spot a car that has a clown with curly hair as the driver, it just might be Charlie Flower on the way to another pediatrics ward to help make handicapped kids a lot happier.

Change of face. Charlie Flower of Communications Services spends his spare time playing the clown to make children laugh.

Scouting honor

John Main, who works in Tool Control, Plant 2, was honored recently by the Nassau County Council of the Boy Scouts of America with the Silver Beaver Award, the highest possible citation for a volunteer worker, for his more than 45 years' service.

His other community service in Hicksville includes church youth committee, manager of Little League team, youth coordinator of high school P.T.A., and a Red Cross first aid instructor.

Set deadline for scholars

Thursday, November 1 is the deadline for high school seniors interested in competing for Grumman Engineering Scholarships to file official applications with their school principals.

A Grumman scholarship provides full tuition for courses leading to a bachelor's degree in any accredited engineering school of the student's choice. At least three of the awards will go to dependents of Grumman personnel. Those eligible to compete must be high school seniors in the top 20 percent of their class scholastically. Official application blanks, plus descriptive literature explaining the whole program, may be obtained from high school principals and school guidance counselors throughout Nassau and Suffolk counties.

Completed applications must be sent by the school principals to Grumman on or before November 7, each accompanied by a transcript of the student's secondary school record, two letters of recommendation from non-relatives supporting the applicant's candidacy, the school principal's report, and a small recent photo of the applicant.

In the event your school does not have the official application forms, contact Bill Wenzel, Grumman Engineering Scholarships Office, Plant 35, Bethpage, N. Y. 11714, or phone LR 5-2682.

Towl speaks on pensions . . .

(Continued from page 11)

the amounts accrued to date.

On a take-over, it's difficult to answer because I don't know what another corporation would do. If they tried to terminate the Plan and siphon off the funds, however, they would have a hard time and be subject to law suits. Our Plan prohibits the diversion of any funds held for the benefit of our retirees and Plan members for any purpose other than paying their accrued pensions.

PN: Perhaps the question foremost in everyone's mind concerning the Pension Plan is this: How does the Grumman Pension Plan stack up against other industrial plans? Is there any likelihood of further improvements to the plan in the future?

CT: Let me say here that I think we have the best pension plan in industry. Of course, I'm not familiar with all the others but I do have some studies that indicate to me that this is true. In a 1970 study of Industrial Retirement Plans put out by Bankers Trust Company, our Plan produced a pension at normal retirement which, when added to the primary Social Security benefit, based on 30 years of future service, provided retirement income as a percent of *average yearly pay* at the levels shown as follows:

At $ 6,000 - - - 99%
12,000 - - - 92%
20,000 - - - 91%
40,000 - - - 91%

Five other aerospace companies were included in the study. On exactly the same basis, they provided the following ranges:

At $ 6,000 - - - 58 to 69%
12,000 - - - 35 to 56%
20,000 - - - 21 to 51%
40,000 - - - - to 48%

In March 1970, Syracuse Governmental Research Bureau, Inc., published a study of Pension Benefits in New York State. This study included data on non-contributory pension plans for New York State Legislative, Executive and State Police personnel, Onondaga County employees, the Syracuse School District teachers, the City of Syracuse employees, and 39 industrial company and four union-sponsored plans. All of the State, Onondaga County, and City of Syracuse plans provided normal retirement benefits greater than any industrial or union plan. But no union plan and only Consolidated Edison in the industry group provided any benefit greater than our Plan. And Con Ed provided a slightly greater benefit than Grumman in only three of the six pay categories reported.

In all other cases, including First National City Bank, IBM, AT&T, Bankers Trust Company, CBS, Eastman Kodak, Mobil Oil, Ford, General Motors—to name a few—Grumman came out ahead.

Since those studies were made, various improvements have been made in our Plan and I am confident that if a similar study were made today we'd still come out ahead. And, if the past is any indication of the future, I'm also confident that there will be further improvements in our Pension Plan in years to come.

PN: Thanks very much, Clint.

CT: It has been my pleasure. I've tried to answer your questions as directly as I can, and tried also to provide our fellow Grummanites with a broader understanding of our Pension Plan. But I would like to emphasize that I couldn't hope to cover all possible situations.

I would suggest that any individual who has more specific questions on early retirement options, eligibility, and the like, should examine the Pension Plan Booklet or contact the Pension Office in Plant 28.

Keglers just warming up for the long, long season

A new kid in the Trader league, George Landin, took over the lead for individual series honors as he fired a 640, based on games of 201, 217, and 222, as he helped the Pros earn a 17-4 victory over the One Short. Another highlight in that recent session at Oscar's in East Islip was Joe Garraffa's 262. He closed at 537. Other standouts included: Bob Washington, 234-595; Mickey Rooney, 232-575; Frank Nelson, 200-570; Al Moser, 213-559; and Hank Mehl, 210-550. . . . Dick Spalding's 814 headed the Master's listings. Nick Malandro's 794 and Ted Dija's 230-239-779 were among the other outstanding efforts in the four-game sets.

Iannacone hits 626

Vin Iannacone put together games of 200 and 237 in the Black bowling league, and ended the evening with 626, far outdistancing Charlie Gobi's 200-205-585. Earlier, Nick Bilogan shot 211-600 to lead the league. Other high marks included Ben Trapani's 226-579; Steve Lawrow's 225-578; Vic Matuza's 201-578; Ted Dija's 210-578; and Rob Klussman's 579. . . . In the Woodbury Mixed loop, Herb Pirkl shot 216-593, Bill Lawson, 213-554; Ronnie Clark, 191; Ruth Christianson, 501; and Martha Juppe, 516. . . . In the early morning circuit, the Bethpage Nite Owls, Rudy Dunkley hit 201 and 211; Bill Buchman, 200; Peggy Kolody, 199-476; Rosemarie Furze, 167-410; and Lon Frazier, 208.

How time flies. Already the Outpost league is in its fifth week of operation. Only 29 more to go. Recently, John Vindett hit the loop's high series of 601, with a high game of 222, to shade Dom Mastrandrea's 227-595. Frank Magri closed with 212-566, and earlier, John Zamojcin had 210-566; Al Wodraska, 203-565; Jim Esposito, 214-571 and 550; and Bob Foster, 212-547. . . . egad! What's happening to the world, the Red league is now slimmed down to only eight teams. John Laporta of the Lucky Strikes fired 221-599 and Ed Schoenfeld 201-213-597 in recent weeks to lead the scoring in the loop. Among the other top scores were Ben Monte, 202-574; Kevin Kremler, 211-571; Charlie Marchessault, 201-579; and Dick Bloomer, 216-572.

Rounding out league results are: *Hawkeye Mixed* — Eleanore White, 184-507; Bill Jacobsen, 215-550; Val Carmody, 481; Phil Barton, 525. . . . *Century Mixed* — Mary Kallansrude, 516; Reed Bradley, 206-554; Helen Miller, 189. . . . *Classified*—Joe Casey, 201-578; Bob Hoehn, 572; Joe Grant, 234-565; Jack Tilford, 223-562; Ted Collock, 210-578; Chick Catalano, 201-567; Bob Ingram, 210-566.

CALENDAR of events

Notice of events for the period October 26 to November 7 should reach Plane News by October 17.

L.I. Industrial Nurses Association: October 12, 13, 14, at Colonie Hill, Hauppauge, 22nd annual state conference, workshops, contact Mary Gise, Ext. 3723.

American Society for Metals: Oct. 17, 8 p.m., Kings Grant, Plainview, "Metals used in today's watches", Bulova Watch Co. representative, open to outsiders, Hal Silverman, Ext. 2181.

Fencing Club: Mondays, 4:30-6 p.m., Plt. 30 cafe., instruction and competition. George Kegney, Ext. 7541.

Duplicate Bridge Club: Thurs., 6 p.m., Plt. 30 cafe., guests welcome, Phil Hodge, Ext. 1195.

Family Campers: October. 14, 5 p.m., Guard Hdqtrs. Plt. 18; Rally, Oct. 19-22, Cantam, Conn., contract Herman Heinlein, Ext. 7903.

Stamp Club: 1st, 2nd, 3rd, Wed. of month, 5 p.m., Plt. 30 cafe., E. Manaker, Ext. 2324.

Ex-Service Men's Club: Oct. 17, 7:30 p.m., Plt. 28 aud., final meeting, Al Kordula, Ext 87259.

Chess Club: Tues., 5 p.m., Plt. 30 cafe., guests welcome, Alex Ikonnikow, Ext. 1252.

Retiree Club: Oct. 31, 12:30 p.m., Holiday Manor, annual fall luncheon.

Flying Club: Fri., Oct. 19, 5 p.m., Plt. 28, nominations, FAA and Lycoming.

Coin Club: Wed., 12:10 p.m., informal, Plt. 25 vendor conference rooms. For more info, contact Ken Hale, Ext. 1936.

Amateur Radio Club: Oct. 17, 5 p.m., on roof of Plant 5, business & operating meeting, guests welcome. E. Goodman, Ext. 87125.

GAA offering Jet tickets

If you're a Jet fan, you're probably wondering how the team will fare during the rest of the season. The Grumman Athletic Association has tickets for five home games at Shea Stadium against teams that may provide the Jets with a good opportunity of winning a couple of encounters.

The home schedule includes: Denver, October 28; New England, November 11; Atlanta, November 25; Baltimore, December 2; and Buffalo, December 16.

Pin loop openings

You might say that all of the GAA sanctioned bowling leagues are underweigh, but some are listing a bit because of vacancies. One of the loops looking for help—they'll take men or women keglers — is the Hawkeye Mixed league which rolls on Tuesday evenings, starting at 7:30 p.m., at Syosset Lanes. They're already well into the bowling season, so hurry and call Phil Alfano, Ext. 2548 or 84350, if you want to get in the kegling picture.

But that's not all. If you are a bowler and haven't as yet signed on with a league, call GAA, Ext. 2133 or 2269, to find out where the openings are.

Four gents top tee loop

There are more than 3,000 miles separating Bethpage from Pt. Mugu, so it's understandable (to us at least) why it took a little while to receive news that The Four Gentlemen carried away the team title in golf play out there. And who owns that elegant sobriquet? Why, Dan Case, Stu Taylor, Curt Rosmaier, and Al Teitler.

Meanwhile, back on Long Island, the Plant 27 Aerospace loop wrapped up its season with the following individual division winners: A - Vin Frizzitta, John Podokonowicz, Al Waite, Wally Langdon; B - Vic Rumore, Bill Slawata, Frank Petrocarli, Joe Mignone.

But that wasn't all. The eight top golfers then teamed up in a cross-division Shaughnessy match-up (that may be the only way to describe it) for a three-round playoff. Leaders in that competition were Al Waite and Bill Slawata, who nosed out Wally Langdon and Vic Rumore by a half-point in the three-round playoff.

Highlight of the round-robin was Rumore's ace on the 143-yard, par-3 fifth hole at the Brentwood Country Club.

On target

What does a pistol shooter do during the off-season? Why, practice for the coming year, of course. At least that's what some of the Grumman Rod & Gun members did this summer to keep their eyes in shape for the upcoming L.I. Industrial League schedule.

In their inter-Grumman matches, the pistoliers competed on an international standard; in other words, while shooting 30 rounds during a match, the marksmen fired "at will" instead of firing 10 rounds in each of the timed, slow, and rapid modes.

Leaders in .22 caliber pistol competition included: 1st sharpshooter, Ron Trenker, 1,562 out of a possible 1,800 total; 2nd sharpshoooter, Charlie Nauss, 1,508; 1st marksman, Phil Boehm, 1,515; 2nd marksman, Roger Metzger, 1,439; 3rd marksman, John Kappler, 1,433.

In center-fire (.38 or .45 caliber) competition, the high scorers were: class A, Trenker, 1,583; class B, Tom Lovatt, 1,449; class C, Jim Barry, 1,366; class D, Tom Cassino, 1,277.

Jets collect second title

It took awhile for the Jets to get back on the championship track. After winning the annual GAA slow-pitch tourney this summer for the third straight time—the only team that has ever accomplished that feat, the Jets ran into a slump. And for them, it was not only unusual, it was down right disturbing.

But they got it all together again a couple of weeks ago by capturing the Tuesday after-hours softball title with a decisive 8-3 victory over the Digital Dynamos. Brian Scheu and Bill Masone paced the Jets with three hits apiece, and Dennis Marrone collected two in the game. The Jets picked up four runs in the first inning to clinch the playoff crown, and though Cleveland Jones speared a hard drive headed down the first base line, and Marrone's throw to third cut off a potential run, somehow the outcome was never really in doubt.

Scheu, who scored all four times he came to bat in the finale, also paced the club during the regular season with a .634 batting average. Masone finished with .579 and Mickey Rowles trailed him with .568.

A third straight all-Grumman tourney title, plus a team crown in Tuesday after-hours play. Not bad. And yet, the Jets give the impression they had expected to do better.

Monos are new champs

Billy Diercks cracked two homers to spark a 10-run burst in the first inning and Mickey Rowles (that name sounds familiar) slammed another as the Monopoles crushed the Good Guys, 18-5, to sweep their second straight Monday after-hours title. Top hitters in the game for the Monopoles included Diercks, 4 for 4; Mike Gabriel, three hits; and Larry Frank and Bill Foote, two hits.

And just in case the N.Y. Yankees are having trouble finding a successor to Ralph Houk, they should check Mono manager Charlie Dietz' record: 117 wins, 7 losses, 7 championships in 9 years. How 'bout that!

Art-Photo show . . .

There are still a couple of weeks left before entries are accepted for the annual GAA Art-Photography Show, scheduled to begin on October 29. There are numerous categories in each of the two sections — art and photography — and prizes for winners in all of them. For more information, contact the GAA office, Plant 30, Ext. 2133 or 2269.

Lost

RAIN COAT: From coat rack, by mistake, in overpass, in Plt. 1, on Tues., Sept. 18, key case w/keys, car reg., in pocket, 935-3066.

For Rent

HOUSE: Smithtown, raised ranch, 8 rm. 4 bedrms., lg. den, gar., pool, $350/mo. plus util. AN 5-7187.

RM: 185 Second St., Hicksville, WE 5-2466.

HOUSE: Calverton, 3 bedrm. town house, cond., 1/r, d/r, den, firepl., c/a, balcony, 2 baths, all appli., $325/mo. 798-7136.

ROOM: Private, nr. Grumman, 935-2466.

HOUSE: Bellport, 3 bedrms., gar., liv. rm., kitch. bathrm., lg. fam., 2 firepl., full cellar, hwh, 286-3366.

ROOM: Bethpage, furnished, bath, pvt. entr., nr. Stewart Ave., app. Plt. 35. WE 5-3902.

ROOM: Share house w/two bachelors, all utilites pd. by landlord, use, of dryer, dishwasher, Farmingdale area, 261-7980.

APT.: 3 bedrm., avail. 10-1, 334-0119 after 5 p.m.

HOUSE: Ronkonkoma, 1 bedrm., liv. rm., din. rm., kitch, all appli., basemt., avail. now $220/mo., a/c, w/w, 2 car gar., 588-1429.

ROOM: nr. Grumman, Wantagh, bath, a/c, PE 5-2064.

HOUSE: Commack, 3 bedrooms, carpeting, fireplace, central air, fenced yar near parkways. $385/month. 582-3467.

Wanted

PROPERTY: And/or House, Coca Beach, Fla., area. 334-0249.

SKIS: Fbgl. 170-180cm, w/o bindings, will trade Kastle 205 cm CPM w/o bind., 473-1032.

MISC.: Avon bottles, decanters, Mickey Mouse, country kitch, Rooster, red Volkswagen, 587-3691.

OSCILLOSCOPE: Tube, 5UP1, 751-0698.

ROOMMATE: Share house with two men, Seaford. 826-5355.

RIMS: Two for '69 Valiant, R. Vizet, Ext. 86319.

MERCEDES BENZ: '38 or o'der models, 540K, 500, 320, 230, any condition. 732-5209 after 6 p.m.

TRAINS: Old, elec., Lionel, Ives, or Amer. Flyer, sma'l or lg. sets. JU 4-6771.

POOL TBL.: Full size, w/balls, cue sticks, machinist vise, 3½ to 4 in. jaws, 265-5118 after 5 p.m.

ROOM: Private nr. Grumman. 935-2466.

MISC.: Marine sextant. HA 3-8437.

APT.: Bachelor, furn., priv. entr., either dock space, for 17 ft. sailboat, or trai'er parking must be reason., 10 mi. of Bethpage. MY 4-2151

OLDS PARTS: Body parts, '56, '88', hdtp. conv., must be towable, LT 9-3145 between 5 to 6 p.m.

TIRES: Snows, (2) 15x735/775, or 14 or 15 in. md. on '65 Plymouth rims, rson., MO 9-7714.

PLANE MODEL: Metal P-47 thunderbolt, AN 5-8529.

ORGAN: To play with numbers only. 728-4456.

TRAINS: Electric, any kind, esp. locos., for handicapped rr. buffs, Holly Patterson Home. SU 1-9615.

Ride Wanted

BOHEMIA: To Plt. 25, 8:12 to 4:42. 589-2624.

UNIONDALE: To Plt. 21, will pay, 7 to 3:30. IV 6-1803.

Car Pool

EAST ISLIP: Plant 30, 8:12 to 4:42. JU 1-3584.

Rider Needed

FARMINGDALE: To Calverton, day shift. CH 9-9236.

For Adoption

COLLIE: Shephard, 22 mo., spayed female, 421-9462.

KITTEN: 8 wks., 931-5143.

KITTENS: 3 mos., black, male, female, Commack area. 543-5283.

KITTENS: Black, white, combo., 7 wks., 586-0757.

BEAGLE: Male, 1½ yr., shots, tri-color, house broken, dog house inc., B. McKenna, Ext. 3050.

COLLIE: Tricolor, female, spayed, 7 mos., akc. reg. all shots, 979-7259.

For Sale

PIANO: Spinet, walnut, w/bench. 588-2391.

VW: '66 Fastback, rebuilt, 1700 cc many xtras, 698-5867 after 4 p.m.

PUPPIES: German shepards, akc, lg. boned, vet check., male, females, $100-$150. 732-9289.

GUITAR: Folk, L-60, w/hd. case, $100. 288-2759.

TIRES: (4) General, 950x165, $50. 589-7449.

LIV. RM. SET: 4 pc. sectional, $150. 589-8479; bed, for summer home, $15.

MISC.: Set of (4) wire wheels, for MG midget III, $60; ASPRO #2 ¾ hp, sand/charcoal, pool filter, $60. 884-4759 after 5:30 p.m.

GOLF CLUBS: Jack Nicklaus, (1ft. hand.) 1-3-5 wds., all mixed set of irons, sandwedge, $35. 698-5941.

BUICK: '62 La Sabre, conv., orig. owner, $300. 751-3015.

COUGAR: '73 metallic green, am-fm stereo, 4,000 mi., a/c, 4 spd. console, $3,675. 249-1641 evgs.

BABY FURN.: Wht.-pastel, crib, 5 drawer, chest & dresser, carriage, high chr./stroller, scale, car bed. 587-3691.

ACCORDIAN: 120 bass, Ferrari, w/elec. pick-up, case, music stand, $135. LI 1-5407.

DIN. RM.: Light blonde, mod. set, reason. 543-2259.

For Sale

BOAT: '68, 88 ft. Uhlrishson sedan cruiser, twin 210 Chrysler motors, sleeps 8, new winter cover, frame, orig. owner, xtras, $13,500. CH 9-2781.

PROJECTOR: Argus side, 35mm, remote contrl., $75. 567-2126.

IMPALA: '69 Chevy, cust., coupe, 8 cyl., auto., r/h, p/s, vinyl tp., $1,150. 472-3264.

TANK: Hot water, gase fired, 30 gal., glass lined, John Wood model, $25. 273-4335.

BOAT: 13 ft. Boston whaler, 40 hp Johnson, one season, compl. w/cover, $1,400. 883-8111.

MISC.: CB walkie talkie, 5 watts, 12 channels, dyna com. 12, leather case, 12 nicad batt., w/elim., charger, $75. PY 6-8497.

SNOW BLOWER: Eska 5 hp, self-start., used once, $150. 226-2256.

MINIBIKE: Stella, 4 hp, rr. shocks, $100. 265-2258, after 6 p.m.

CHEVY: '69 396 ci., 375 hp, ZL-1 cam, Tarantula manifold, Holley 4 barr. carb., 40 Shiefer flywheel, rec. rebuilt, $350. G. Mead, Ext. 589.

BABY FURN.: Biltrite, carriage, $60; fold. play pen, dressing tbl., walker, $15 ea; car bed, infant seat, $10. IV 6-1776.

For Sale

BIKES: Boy's 20 in., Columbia, $12; Girl's Huffman 24 in., $12. 422-0030.

HOUSE: Sayville, 3 bedrms. ranch, lg. eat-in kitch., full basemt., s/s, w/w, att. gar., patio, lndscpd., fenced, walk to shops, schools, $33,500. 589-3684.

HOUSE: Farmingdale, 3 bedrm. ranch, basemt., gar., din. rm., $35,990. 588-3799.

PROPERTY: Port St. Lucie, Fla., 80x125, cash or assume payments. 248-0077.

BOAT: '71 17 ft. w/sun tp., depth finder, 30 gal. tank, 60 hp, $2,750. V. Ciampa, Ext. 3751.

HOUSE: Islip, mother/daughter, 10 rms., inc. sep. apt., w/w, panel., ¼ acre corner, 24 ft. pool, hip roof ranch, xtras., $41,500. 581-1264.

BEDRM. SET: Danish, fruitwd. fin. bkcase headbd., 2 end tbl., 1 triple dresser w/mirr., (1) chest, 997-8678 after 4 p.m.

PUPPIES: Siberian huskies, skc. masked, male/female, $100-125. PY 8-14341.

MISC.: Pool tbl., 6x3 w/equip., $40; RCA 21 in. TV, $10; am-fm stereo, Harmon Kardon HK250, tuner-amp, $20; wrought iron patio tbls., $20; lawn-mower, $10; 724-5460.

TRANSMITTER: Drake 2NT novice w/manual and crystals, $125. 261-9253.

MOTORCYCLE: 650cc BSA, rebuilt eng., all new elect. syst., $395. 889-7129.

CUTLASS: '68 Supreme, auto. trans., p/b, p/s, a/c, bucket seats, 2 dr., $300. 744-6653.

IMPALA: '63 SS, 350-550 hp, full cam, solids, hurst, zoom, holley, cragers, 5:13 posi, new brks., xtras., reason. offer. 485-3473.

SAAB: '69 sedan, v4 eng., wht., r/h, $900. 796-2659 after 5 p.m.

IMPALA: '66, hyd. radio- heater, $275. 735-1064 betw. noon-6 p.m.

LIV. RM. SET: Couch, match. chr., beige, odd chr. in gold. OV 1-8493.

VW: '71, $1295. HA 3-1771.

TYPEWRITER: Port. Olympia, w/case, $25. PY 8-4322.

MISC.: Sears, 46 in, snowplow b'ade for Sears 12 hp, tractor, ready for hook-up, $30. TEL????

DRUMS: 4 pc. Kimberly drum set, white pearl, $135. CH 9-3477.

PROPERTY: Fully improved, 1 acre, Rt. 7, no. of Pittsfield, Mass., $6,500. 822-1188.

FREEZER: 15.5 cu. ft., Gibson, coppertone, new, in crate, $300. 822-8490.

APPLIANCES: Freezer, GE upright, 18 cu. ft. white, $75; refrig., Admiral wht., $35; dryer, Hot Point, one temp. wht., $15. 587-7093.

MISC.: Twin post massager, cotton belt, 4 in. wide, leather ends, Sears, $25. 379-0260.

BOAT: 29 ft. Pacemaker, sportsfishherman, fwc, s/s, eng. rebuilt 9/71, $3,700. 264-0884.

SKIS: Head 360, 195cm, Solomon step-in w/ss, $100. HA 1-1945.

MISC.: (2) H78x14 studded snows, on rims, Chevy or equiv., $45; 12 v trans. car radio, for Dodge Charger, $18; (2) basebd. heating units, 5 ft. long, $15. 665-3340.

MISC.: Dbl. hung wd. window w/storm, screen for frame, approx. 42 in. x 38 in., ask. $15. 826-6272.

YAMAHA: '72, 250cc, 130 orig. mi., $600. 277-0944.

at your SERVICE

This is a free service to Grumman personnel for non-commercial advertisements, accepted on a first-come, first-served basis. Classified advertisements are carried in PLANE NEWS only on the basis that everyone replying to such advertising will receive fair and equal consideration regardless of their race, creed, color, or national origin.
Type or print ad on form available at Employees Service and Engineering counters, and send via interplant mail to PLANE NEWS, Plant 5, Bethpage. List home phone (with area code if outside Nassau or Suffolk). Limit: one ad per person per issue. No item under $10, no firearms or ammunition.

HAM GEAR: Clegg Zeus, new 4CX250B, Dow-Key re'ay; HQ110A-VHF w/watch. spkr., (2) 7 element 2 mtr. beams, phasing harness, $375. HA 7-0052.

MISC.: Boat trailer hitch for Pontiac, Buick, $15; Scott spreader, $10. MO 9-2892.

HOUSE: Smithtown, Forestwd section, lg. 4 bedrm. 2½ baths, colonial, 22x24 den w/firepl., pool, ½ acre, $62,500. AN 5-8572.

DRUMS: Rogers, blue ripple pearl, professional set, all equip. $250. 864-1579.

PONTIAC: '64 tempest conv., '66 tempest sta. wagon, reason. offer. 724-5989.

BOAT: 14 ft., 70 hp, inbd. gray. w/trailer, $375. AR 1-0254.

MOTORSCOOTER: Vespa 150cc, 300 orig. mi., compl. retuned, helmet incl., reasonable. 864-7731.

BOAT: 19 ft. slickcraft, 327 Chev., in/outbd., full cover, s/s radio. 884-6535.

DATSUN: '69, 2 dr. SS510, 4 on floor, r/h, a/c, tape stereo, 4 Perelli radials, mag wheels, locks, alarm syst., 35,000 mi., $895. TU 8-9280 after 5 p.m.

IRISH SETTERS: Puppies, akc., show quality. 799-4059.

HOUSE: Mt. Sinai, cape cod w/firepl., 4 bedrms., 2 baths, 1/3 acre, w/w, lg. patio w/awning, landscpd., $39,900. 928-2573.

CORNET: Olds, w/case, music stand, $50. HA 3-3149.

ELDORADO: '69, 36,000 orig. mi., full pwr., $3,200. 587-0189.

DATSUN: 240Z, '72 4 spd., 15,000 mi., a/c, 8 track, xtras., $4,800. 483-3586 after 9 p.m.

OUTBDS.: '67 Johnson, 80 hp elec., tank/hose, morse contrls., $450; '71 Johnson 50 hp., elec., tank/hose, controls, $550. 226-8142.

OLDS: Delta 88, '69, custom 2 dr., full pwr., a/c, 50,000 mi., $1,100. RO 4-7785 after 6 p.m.

FREEZER: GE upright, 18 cu. ft., best offer over $100. 921-3192 evgs.

SAX: Tenor, metal mouthpc., used once, $18. 587-4413.

ENCYCLOPEDIA: '65 World Book plus all yr. books through '72, $65. IV 6-7340.

TIRES: (2) snows, mtd. on rims for Volvo '68 or earlier, $35; rims, $10 ea. 293-5843.

MISC.: F78x15 tire; 26 in. boy's bike, nds. pedal; Brownie funsaver, 8mm movie camera, adjust. bedr frame, nds. 1 caster, reasonable. 735-5261.

SUZUKI: '72, 350cc, $500. FL 9-0465.

MISC.: '69 500cc Kawaski, blk., new pistons, clutch, chain, sprockets, crank shaft, $450; '67 250 Yamaha, red, new pistons, $225; bedrm. set, chinese chipindale, 5 pcs., best offer. 226-0570.

SNOWBLOWER: Sears, fits all Sears tractors, $100. AN 6-5381.

BOAT: '70 Mfg. "Caprice", 18½ ft., fblg. runabt., '70 115 hp Evinrude, compl. controls, 20 gal., inbd. tanks, elec. bilge, spare tanks, xtras, cox tilt trail., $2,400. 724-5460.

MISC.: (4) wd. kitch. chrs., $15; patio umbrella, metal stand, $25; sofa bed, $150; (2) sofa chrs., $60; Singer sewing mach., 285K, $30. S. Buckwald, Ext. 84651.

BOAT: 16 ft. fbgl., runabout, 75 hp Johnson, tilt trailer, skiis, anchor ,xtras, $900. 473-1032.

CAMPER: VW '69 pop-top, snows inc., am/fm, $1,800. 924-5556.

TRAINS: 59 sections, HO gaugee, never used, 4x8 homesite train board, $13. 261-0046.

HOUSE: Bethpage, colonial, 4 lg. bedrms., 2 baths, liv. rm., fin. rm., eat-in kitch., den, store rm., ½ baths, full basemt., fin. floor, lndscpd., fenced, patio, pool, 9 yrs., $51,990. M. Daniels, Ext. 84681.

TRAILER: Airstream travel, '71 25 ft. twin, self-contain., a/c, sleeps 4, Reese hitch, xtras., 798-5322.

CADILLAC: '69 4 dr. Sedan de Ville, all pwr., fm stereo, auto, cruise, climate contrl. a/c, $2,450. 864-3191 evgs.

TIRES: (2) 700x13 snow mtd. rims, (1) reg. tire mtd., $25. 921-0328.

MALIBU: '68, sma'l v8, auto. trans., delux, int. low mi., $1,175. 543-8189.

FREEZER: 500 lbs., Gibson, 2 yrs. old, $250. MO 6-5124.

BOAT: 21 ft. Sea ray, in/outbd., 307 Chev. 225 hp., new carpet. deck, cuddy cabin, marine head, bait wells. 667-3224.

FORD: '71 Bronco, 302/v8, 4 wh. drive, 3 spd. std., roof rack, 5 mtd. snows., 31,000 mi., ask. $2,600. 486-1458.

CATALINA: '68, 4 dr. hdtp., $895. OV 1-4412.

PUPPIES: German shepard, akc. blk-silver, lg. bonded, show bloodines, $110. MO 7-5779.

MISC.: Magnus organ, 12 chrd., $25; 18x4 heavy duty pool liner, $35. 273-8413.

TRAILER: Camping, hdtp. pop-up, stove, sink, ice box, $1,200. 543-3640.

BED: Full size, w/frame, hd. bd., $65. 585-8992.

plane GRUMMAN news

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NASA

(Continued from page 7)

Ariel 1, was launched in 1962 and developed jointly with the United Kingdom. Over the years, the space agency has conducted 18 cooperative satellite and probe joint projects with Canada, France, Germany, Italy, Great Britain, and the 10-nation European Space Research Organization (ESRO), and plans to continue international space ventures in its next 15 years.

A few years ago, Alan Shepard, the first American in space, was asked to comment on what he considered to be the significant achievements of manned space flight. "I feel we have reached the payoff stage, the stage when the information we have learned in the early flights, the techniques we have used for putting man in space and using his abilities, have reached fruition so that the public, the nation, and the world can benefit from the tremendous technology."

On its 15th anniversary, NASA is very much aware of this, and is interested in finding ways that space technology can be used throughout the economy. Says Dr. Fletcher, "We are a problem solving agency, and our methods and our experience are applicable to problems in other fields. We do not think it very realistic to sit back and wait for technology spin-offs to occur. We believe it much more productive to identify the problem areas where NASA know-how is applicable. . . ."

Many medical benefits have been derived from the space programs, such as a fully automatic gas analyser, now on the commercial market, which gives prompt information on human respiratory and metabolic functions; and ultra-clean laminar air-flow techniques that help surgeons avoid infection in hospital surgeries.

There are also "spin-off" techniques being used in industry today. For example, there is the rapid-scan tire tester used by a major U.S. tire manufacturer; NASTRAN, a computer program to analyze the behavior of structures under stress, and a heat pipe which is a self-contained, fully automatic heat recovery and transport system that can transport heat at approximately 500 times the rate possible with the best solid conductors. This heat pipe is being used domestically in recovering and recirculating heat from chimney flues, and also an application of the pipe is being applied in the kitchen by ways of the "cooking pin" for distributing heat evenly through meat during the roasting process.

In NASA's first 15 years, some 300 satellites have been sent into Earth orbit and interplanetary space. The plan for the '70s is a family of planetary probes designed to investigate Mars and Venus. Orbiting Mars in 1971, Mariner 9 provided man with his first close-up look of that distant planet, returning to earth more than 7,000 pictures and other important scientific information. This information will also provide data for the 1975 planned Viking life-detection laboratory on the Martian surface.

Pioneer 10, launched in 1972, will make the first reconnaissance of giant Jupiter in December, 1973, before becoming the first manmade object to escape the solar system; a second Jupiter probe, Pioneer 11, is scheduled to reach the planet in December, 1974.

"In the space applications field, the past 15 years have been a period of experimentation, demonstration, and the first use of operational systems," says Dr. Fletcher. "In the next 15 years, the emphasis will be on maturing the technology . . . and broadening the scope of operational systems. I expect applications to become a dynamic NASA endeavor in support of the fast growing number of user agencies."

One of the areas in which NASA has helped man on Earth is through communications. Ground work was done in the early 1960s with passive and active communications satellites and early meteorological spacecraft.

The Echo balloon satellites—in which Grumman-made vaccuum cannisters were used—launched in 1960 and 1964 were the early stepping stones to the billion-dollar global commerical communications satellite industry we know today. NASA is now phasing out of the communications satellite research and development activity, leaving future endeavors to private industry.

In 1972, the first Earth Resources Technology Satellite, ERTS-1, was launched and continues to return information in managing Earth's resources and observing its environment. More than 300 investigators are using data from this spacecraft in experimental applications to these fields.

The NASA/Grumman Orbiting Astronomical Observatory 3 (OAO-3) called Copernicus, which has been orbiting the Earth since August 1972, has been providing new information on the origin and evolution of the physical universe.

Another good example of maturing technology in the applications field is the Synchronous Meteorological Satellites which will be launched next year to keep a continuous watch over the world's weather.

NASA's first 15 years have indeed been marked with technological advances; even Jules Verne would find them astounding. But the next 15 years should be equally remarkable—and hopefully Grumman will be able continue to play an important role in this nation's space age.

For Sale

CAMERA: Speed Graphic, 4x5 4.7 135mm. Optar lens, Graphloc back, grnd. gl., 12 shot mag. w/ septems, Kolart coupled range finder, 2 flash guns, Heiland super & graphic Jr., w/2 reflect., xtras, filter, case, etc., $150 for package. 273-1613.

MISC.: Royal stand. typewriter, $45; Monroe elec. calculator, $75; Bell & Howell port. tape record., $30; Telectro port., tape recorder, $20; VW snow tires, on rims, $30. 744-9001.

FURNITURE: Rock maple tbl. chrs, wedge-peg construct., cust. made, 2 self-strong, leaves, open approx. 26x72, $75. 473-3482, after 6 p.m.

LADDER: 33 ft. wd. ext., $15; J. Wittico, Ext. 86288.

BEDRM. SET: Prov., 5 pcs., king hdbd., twin beds, 2 dressers, 2 night tbls., all glass tp., ask. $400. 269-6829.

PIANO: Baby Grand, $375; inc. delivery & tuning. 888-7949.

MISC.: 14 ft. GE refrig., 9 yrs., $75; GE washer, 3 yrs., $75; VW tow bar, $45. 751-0577.

MISC.: Small classic guitar, $10; Renn 49m reel, $18; Trolling pole, $10. 473-1162.

BUICK: '70 Le Sabre, hdtp., p/s, p/b, a/c, orig. owner. 543-4197.

MISC.: Spring horse, simul. hair, $22. 798-5914.

DIN. RM.: Early Amer., 2 leaf tbl., 4 chrs., high hutch, $250. 269-2972.

POOL TBL.: 8 ft., all access., $65. 931-5921.

POOL: 24 ft., Coleco redwd., compl. SU 1-9290.

BUICK: '63 Wildcat, new ball joints, rec. tune-up, $400. MO 9-7686 after 5 p.m.

HOUSE: Bethpage, 3 bedrm., split level, 2½ baths, eat-in kitch., din. rm., fin. basemt., gar., w/w, xtras, after 5 p.m. WE 1-3148.

BEDRM: Walnut formica, w/wht. fronts, 48 in. dbl. dress., 30 in. 2 dr. cabinet, corner desk, 36 in. vanity, nite tbl., ask. $235. 433-2668.

MISC.: Rotary lawnmower, $20; boy's polo bike, 20 in., $20; girl's 20 in. bike, $15; girl's 24 in. bike, $15. 935-4148.

HOUSE: Mt. Sinai, L-shaped ranch, wd. ½ acre, l/r, d/r, eat-in kit., 3 bedrms., 2 baths, den w/firepl., framed basemt., 1½ car gar., all appl., $48,000. 928-1264.

For Sale

FORD: '72 custom, p/s, p/b, a/c, low mi., $1,800. WE 1-1952 after 5 p.m.

HOUSE: Merrick 3 bedrms., att. gar., w/w, fin. basemt., patio, lndscpd. wash. dryer, dishwash., nr. schools, xtras. $38,900. C. Ortton, Ext. 9640.

SAAB: '65 2 cycle, model 96 w/sunrf., nds. eng. wk. 364-1883.

BOAT: '66 23 ft., fbgl. Penn Yann, 200 hp. omc, full dacron cov., c.b. radio, all equip., new '73 eng., outdrive compl redone '73. 825-2222.

POOL: Seaspray sharkline, 18x32, never used. $435. WE 5-1973.

PUPPIES: St. Bernard, akc, born 8-30, all shots, wormed. 475-8540.

PUPPIES: Newfoundland, akc, worm. shots. 698-6047.

TRIUMPH: GT6 Mark III, '71, 32,000 mi., am/fm, $1,800. WE 8-9042.

LAND: Clarksville, Va., 1.58 acres, 365 ft. on lake, $10,000. 588-3285 after 5 p.m.

WHEELCHAIR: E&J Hollywd. model, compl., $125; Canadian crutch, adjust., $10. E. Zarodkiewicz, Ext. 84481.

FIREWOOD: Kindling, cut to size logs, approx. 1 cord, you haul, $15. 587-3203.

TRAIN EQUIP.: Layout, compl. 751-8714.

MISC.: 11 ft. freezer, refrig., G70x14 snow tires, 16 lb. washer, 16 lb. dryer, pool tbl., reasonable. 884-4763 after 3 p.m.

OPEL: '68 Rallye Kadet, r/h, best reason. offer; Kenmore coppertone stove, 30 in. gas. 226-7818.

MOTORCYCLE: '69 Harley Davidson, FLH, fully equip., $2,400. 587-9125 after 7 p.m.

BOAT: 16 ft. Thompson, 50 hp Merc., trailer, elec. start., $450. 929-4679 after 5 p.m.

CAMERA: Revere pwr. zoom 8mm movie, Ricoh auto movie proj., editor, splicer, $65; Peterson folding stroller w/canopy, $12. 724-3962.

BABY FURN.: Coach carriage, $65; swing; dressett, $15; baby clothes, $10. MO 6-6218 after 4 p.m.

PUPPIES: German shorthaired pointers, akc, 9-25, males and females. 266-6739.

GUITAR: w/case, steel string, Estrada, $50. 921-1895.

For Sale

HOUSE: SW Brentwood, 4 bedrms., fin. basemt., shop. kitch., dinete, patio, corner 150x75, $30,000. MO 7-0677 after 5 p.m.

CAMARO: '69 rs & ss, 390/350 eng., turbo, a/c, elec. wind., posi, vinyl rf., $1,850. 757-8536.

HOUSE: Lake Grove, Strathmore colonial, 6 yrs., 3 bedrms., 2½ baths, den, formal, din. rm., dinette, liv. rm., patio, new refrig., new carpet., 2 car gar., oversized corner plot, relocating - must sell. C. Lazar, Ext. 3723.

TIRES: Snow, G78x14, w/w, mtd. on Ford rims, $35. 757-0837.

TIRES: (2) 650x13 Gillette Prem., (4) ply tires, used less than 1,500 mi., $30. S. Danos, Ext. 2856.

GTO: '68 conv., 400 eng., a/t, p/s, p/b, r/h, tape deck, console, $1,050. WE 8-1930.

MISC.: Racing parts for Chrysler prod., Edlebrock intake, headers, cam & kit, air shock, 212-347-6516 evgs.

BOAT: 15 ft. tri-hull w/55 hp outbd., trail., $1,550. 666-6725 after 5 p.m.

PROPERTY: 3 acres, 205 ft., on road, Stroudsburg. LY 3-2232 evgs.

LE MANS: '68 v8, 2 dr. hdtp., $750. FR 8-6849 after 6 p.m.

VW CAMPER: '62, wired for 110- 2 flor., 10 outlets, attach. tent. 694-9644.

STA. WAGON: Ford '68, 8 cyl., auto. 269-6915.

MISC.: '33 Willys, less eng. trans.,; '59 vette, needs wk., w/compl. eng., trans., $3,000; '69 Ford country sedan, p/s, p/b., $1,450. SU 5-8806.

FORD EQUIP.: 302 eng., '69, 40,000 mi., $200; auto. trans., '70, 15,000 mi., $125; Hurst dual gate auto-shift., $5; Hooker headers, muffl., $100; Ford 289-302 4 bbl. intake, manigold-carb., $20. IV 9-2117.

HOUSE: Freeport, split level, 3 bedrms., 2 baths, din. rm., playrm., den, cent. a/c, new kitch., appli., alum. siding, $48,000. FR 8-3760.

DODGE: '70 ¾ ton, v-8 pickup-camper, fully equip., gas stove, refrig., $2,800. 676-8365 betw. 5-9 p.m.

HOUSE: Expand. Levitt ranch, huge liv. rm., din. rm., witch. w/paned Fr. wndws., 4 bedrms., work rm., 2 full baths, oversized lot, front patio, $39,990. PE 1-8498.

We goofed . . .

We misread the computer runs of the September anniversary list. Sorry 'bout that. Nicholaus Mock of Warehouses, Plant 21 is not Nick Nock. Theodore J. Martines is in Contacts - F-14. And George H. Minch of Technical Staff, Plant 30 is not George Finch.

Personal

Blood donors are needed for Mrs. Jessie Clark, mother of Jessie Gabries, who works in Plant 2 Repro. Any type blood donors can donate their blood to Mrs. Clark at the Glen Cove Community Hospital. The Glen Cove blood bank is opened from 10 a.m. to 8 p.m., Tuesday, and 9 a.m. to 12 p.m. on Saturdays. For further information contact Jessie Gabries on Ext. 84220.

OBITUARIES

Plane News has received word that death has come to the Grumman personnel listed below. We extend sincere sympathy to relatives and friends.

JOSEPH E. OPACO of Wire Prep, Plant 5, died September 27 at the age of 54. He had been with Grumman since 1951 and lived at 90 Locust Avenue, Oakdale.

THOMAS L. ALGER JR. of Final Assembly, Plant 3, died October 5 at the age of 53. He had been with the company since 1952 and lived at 625 Madison Ave., Lindenhurst.

STANLEY M. MAZUR of Employee Services, Plant 2, died October 8 at the age of 57. He had been with the company since 1942 and lived at 6 Maple Road, Huntington Station.

Kincheloe Award to Sewell . . .

(Continued from page 3)

vention system testing for the F-14. Sewell, who was promoted to Chief Test Pilot at Grumman Aerospace two years ago, has flown 104 different types of aircraft, including airplanes, sailplanes, and helicopters, logging more than 7,400 hours in that effort.

Why was his contribution of a spin prevention program on the F-14 so important? According to the award nomination form:

"The significance of Sewell's contribution may be measured against the combined U. S. Armed Services loss rate of F-4 Phantoms to stall/spin accidents. This number exceeds 100 in spite of that airplane's successful completion of the classical spin demonstration requirements. Many of these losses resulted from departures (from controlled flight) at low altitude where spin recovery techniques were only of academic value.

"The only visible solution to this problem is to prevent departure from controlled flight and hence remove the threat of incipient spin.

"Sewell's work in the F-14 has achieved this goal without restricting in any way the pilot's ability to get the most out of his airplane to meet the demands of the tactical situation.

"Sewell's contribution should result in greater tactical achievement with lower pilot training requirements and an attendant savings of millions of dollars in valuable airplanes."

Congratulations, Chuck!

Worried about fuel shortage? . . . Here are winter heating tips

Concerned about the energy shortage? More concerned about the rise in fuel-oil prices? Here are some tips from Facilities Engineering on how to save heating dollars and conserve fuel oil.

- When entering or leaving your home, close exterior doors promptly to keep the cold out and the heat in.
- Draw window shades and drapes — or close blinds — at night to limit heat loss through glass.
- Keep temperature moderate (average thermostat setting 70° during the day and 72° after sundown). During the night sleeping hours, lower the thermostat to 65° (eight hours save approximately 5 percent on fuel).
- When leaving the house for a day or more, lower thermostat to 60°.
- Install or check for leads on existing weather stripping around doors and windows for fuel savings of up to 15 percent.
- Remove rugs and furniture from places where they block the air from circulating through radiators and registers.
- Insulate your attic floor. This alone can produce savings of up to 20 percent on fuel. Be sure hot water, steam pipes, or warm air ducts are well insulated if located near outside walls to minimize heat loss and prevent freezing.
- Install storm windows and doors for estimated fuel savings of as much as 15 to 20 percent.
- Heating plant should be checked, cleaned, and adjusted each year. For instance, a mere one-eighth inch soot deposit in your boiler can increase oil consumption by as much as 10 percent. The burner, nozzle, filter, controls, ignition, etc., should all be checked and replaced if necessary. It is preferable that this work be done by an expert serviceman to insure proper adjustment for good combustion efficiency.

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Two take lead in idea derby

It was a couple of months ago when Ed Smyth of F-14 Sub-Assembly, Plant 1, and John Transue of Ordnance, Plant 6, were hailed as being the biggest ding-dong daddies of the corporate suggestion system—after all, both had had at least 25 of their ideas implemented into the company operational process in some way—and by this time, if things really do follow their natural course of events, the two should be well on their way to acquiring their second diamond pin award.

There are some people who store away useful ideas in their memory bank; others, like Smyth and Transue, like to have a "print out" once in awhile so that everyone can benefit from their suggestions.

Smyth has tacked up 31 approved suggestions in the past six years, so it's no wonder that Vice President Tom Johnson (above L) made a special trip to Plant 1 to present a diamond award to him.

And Transue is not far behind. He has had a total of 25 accepted suggestions, and Vice President George Skurla (below R) took time out from his duties at Calverton to give John his award.

Think of the diamond pin as only a bonus. Earlier, for these same ideas, Smyth had earned $425 in U.S. Savings Bonds, eighteen $3 award certificates, and a plain, sapphire, ruby, and emerald Project Sterling pin for his 1st, 3rd, 6th, and 10th approved suggestions.

Transue pocketed forty-five $3 award certificates, a flight jacket, $150 in U.S. Savings Bonds, and an Accutron watch for the top Flight Safety suggestion in 1972. John also earned the various Project Sterling pins.

Thing it's about time you had a "print out" of *your* memory bank?